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Industry Does Not Expect Unrestricted Flow in East Texas But Output Must Be Curtailed

By ANDREW M. ROWLEY

THERE is little or no fear upon the part of the petroleum industry that the East Texas area will be permitted to produce without restraint, under any circumstances. Chaotic conditions of last year with resultant 5 and 10-cent prices are still fresh in the minds of everyone interested in the oil business in that territory. Many who advocated unrestricted output a year or so ago now are taking leading parts in efforts to maintain regulations as promulgated by the Texas Railroad Commission.

Every producer and royalty owner certainly has had enough experience by this time to realize that overproduction will bring low prices and that better prices can be expected and justified only when the output of crude oil is maintained at a level which is somewhat below requirements. Producers in the past have not always been rewarded as quickly as conditions seemed to warrant better prices but the recent increases in prices by a number of companies indicated a recognition of this fact and an effort to help the producer maintain his income at a living level.

But, it is also true these increases were predicated on the assumption production would be reduced very materially and that the East Texas area would be held to 335,000 barrels daily. Any letting up of the conservation movement affecting the East Texas area and any gains in other fields most surely will nullify the endeavor of buyers who desired to compensate producers for lessened output. It must be kept in mind also that additional wells are being drilled in active sections; that operations in East Texas during the past week recorded a gain; and that the demand for crude oil will continue to show a decline from now until about next March.

Operators cannot afford to sit by and mark time now waiting for court decisions or other political or legislative assistance in solving the problem. The one problem, so far as the price structure is concerned, is that of overproduction. If the industry wants the better prices the only condition which will justify these prices and make them stick, regardless of whether all companies desire them or not, is to hold output to less than market demand, necessitating some withdrawal from storage. A good effort has been made to place the industry on a better price level. Crude oil production must be reduced quickly to justify this level. A good start was made during the past week especially in Texas. Oklahoma is somewhat above the allowable set for that State and further reduction is necessary in California.

Crude Oil Production in the United States

Estimated daily average production for the week ending October 29 and a comparison with previous week and one year ago, follows:

	Oct. 29	Oct. 22	Oct. 31, 1931
Oklahoma—			
Oklahoma City	75,840	79,265	184,815
Seminole-St. Louis	114,720	112,434	116,325
Remainder of State	204,905	207,791	217,475
Total Oklahoma	395,465	399,490	518,615
East Texas—			
Lathrop	131,854	139,903	122,203
Kilgore	101,410	108,110	151,515
Joiner	108,549	114,638	144,011
Total East Texas	341,813	362,651	417,729
West Texas	148,905	162,352	195,182
North Central Texas	72,212	72,104	85,835
Texas Panhandle	44,095	49,461	65,037
East Central Texas	49,361	51,908	56,435
Gulf Coast—Texas	121,987	118,286	118,722
Southwest Texas	57,736	58,044	56,435
Total State of Texas	836,109	874,806	995,375
Kansas	96,130	99,060	102,740
North Louisiana	29,285	29,995	28,890
Gulf Coast—Louisiana	34,744	34,927	31,854
Arkansas	34,015	33,870	37,760
Eastern Fields	120,000	119,000	116,000
Rocky Mountain area	74,490	74,391	93,867
California—			
Santa Fe Springs	66,000	77,250	59,750
Long Beach	67,000	67,500	74,000
Playa Del Rey	13,500	13,750	22,500
Elwood	14,000	14,000	24,250
Kettleman Hills	59,000	58,500	58,000
Remainder of State	252,750	254,750	255,500
Total California	472,250	485,750	494,000
Total United States	2,092,488	2,151,289	2,422,418

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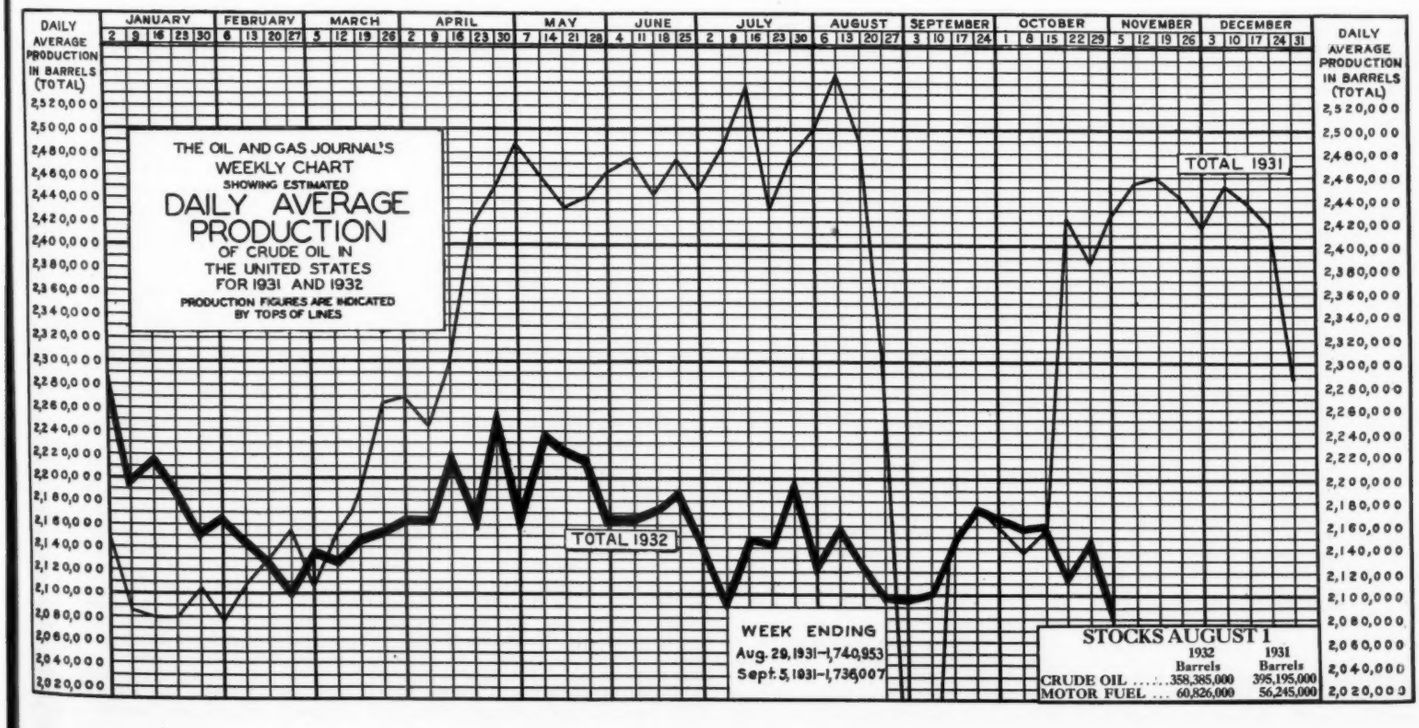


Expansion in Canadian Refining Operations Will Supply Domestic and Foreign Requirements

By C. O. WILLSON

With several new refineries already completed or under construction, the Dominion of Canada is rapidly nearing the goal where it will be not only self-sufficient so far as its domestic requirements for petroleum products are concerned but also will increase its importance in world markets.

Since the first of the year three small plants have been completed at scattered points in the dominion and two larger refineries are under construction and scheduled for completion early next year. In addition, improvements have been made at several of the older plants. It is also known that at least two companies with distributing facilities in Canada are considering the construction of refineries.

In regard to additional plant construction, it is possible that the action of the Canadian Department of National Revenue on October 20 in abolishing special dumping duties on gasoline which were made effective late in 1930, may have a tendency to retard new expansion at this time. This latest decision in effect, materially reduces the disadvantage of importing companies competing with domestic refiners for Canadian business. The antidumping act provided that gasoline from the United States and other foreign countries could not be imported under certain prices established by the revenue department. This antidumping price which was changed from time to time was often 2 or more cents higher than the going market in the United States and this fact coupled with a 2½-cent regular import tax which is still in effect gave the domestic refiner a substantial advantage when competing with the importer.

It is said that the decision of the revenue department to drop the dumping duties was due to the fact that certain gasoline exporters in the United States were evading the tax in shipments to their Canadian subsidiaries or affiliated companies. This was accomplished by having the Canadian subsidiary companies pay the "fair market price" as established by the revenue department which was more than the price in the United States even though this price meant selling the gasoline to consumers at a loss in Canada. The parent company was more than compensated for this loss by increased profits in its operations in the United States.

A favorable factor in regard to expansion of refining facilities in Canada has resulted from the tariff conferences of all the countries constituting the British Empire. These conferences have aimed to stimulate trading by giving preferential import rates to the individual countries within the empire. Thus Canada will have an additional incentive to expand its refinery exports to Great Britain and other countries of the British Empire. There are still some details to be ironed out in connection with this plan but Canadian oil companies are hopeful that the much discussed economic conference recently held in Ottawa will prove beneficial to the oil trade. To this end every possible aid is being given by the government of Canada to encourage the location of refineries as well as all other industries within the dominion. It is this fact that largely accounts for the growth in petroleum refining over the past year.

Requires Investigation

Those who are familiar with the oil situation within the Dominion of Canada state that outside companies considering the construction of plants will do well to make a careful study of refining and marketing conditions and all other factors entering into the successful operation of a Canadian oil unit before making any investments in plant facilities. While, in general, conditions in Canada in regard to refining operations more closely resemble those of the United States than any other country, there are important differences which several companies have discovered too late, to their financial grief. The dominion in its oil operations has been relatively free of the troubles of overexpansion common to the United States in recent years but with an unwarranted expansion of refinery facilities this situation could easily be changed and the newcomers will find themselves forced to cope with problems which are ruinous from the standpoint of profits.

The accompanying tables (Nos. 1, 2, 3 and 4) were prepared in order to give a brief summary of refining and marketing conditions in Canada based on government data for 1931. The available information for 1932 does not show any marked change in operations so far this year. More plants are in operation than last year but the new output is small and this increase has been partially offset by decreases at older plants. Data for the first six months based on gasoline tax collections show a slight decrease in consumption for the first six months of this year when compared with the same period last year and representative distributors predict the decrease will be larger for the last six months. They do not believe it will be as great as the 10 per cent decrease estimated for the United States.

Gasoline Demand

In making comparisons with data on operations in the United States it is necessary to keep in mind that the Imperial gallon used in all government reports covering oil operations is approximately 20 per cent greater than the American gallon. Thus the 546,476,903 Imperial gallons which was the total indicated consumption for Canada in 1931 measured in American gallons was 677,000,000 gallons. This gallonage was exceeded by several states in the United States for 1931 being about 43 per cent of the New York consumption and 50 per cent of the California total.

At the close of 1931 there were 1,206,836 motor vehicles including motorcycles registered in Canada and the population totaled approximately 10,000,000. There are states in the United States with half the population of Canada that have approximately the same number of registered motor vehicles. These comparisons show that the number of motor vehicles and gasoline consumption in Canada in relation to population is approximately half that of the United States.

Gasoline consumption in Canada as shown in Table 4 is more seasonal than it is in the United States. This is important because in both refining and marketing operations it means the maintenance of sales and manufacturing staffs in excess of requirements over a part of the year. For instance, gasoline consumption in Canada based on tax reports in July, 1931, totaled 66,795,000 gallons (Imperial) which was more than twice the indicated consumption in either January, February or March. In certain sections of Canada there is practically no gasoline consumption during the winter and early spring months with an active demand during the summer months due in part to the tourist business. Refiners and distributors serving this territory have the extra costs always associated with any business which varies with the seasons. To take care of this seasonal shift in volume some refiners not wishing to shut down their plants store large quantities of gasoline during the winter months. The alternative is to have refining capacity in excess of average daily requirements for the year so that the peak marketing requirements of the summer months can be provided for currently at the refineries.

Another feature of Canadian marketing is that the demand for petroleum products is largely centered in a relatively small section of the dominion. This is true not only in the case of gasoline but all the other principal products reflecting the fact that a large part of Canada is sparsely populated due to climatic and economic conditions. As shown in Table 4, 50 per cent of the gasoline consumption is in the one province of Ontario. The great bulk of the gasoline consumption is in the St. Lawrence Valley including the Lake Ontario and Lake Erie regions supplemented with a relatively heavy demand in the Vancouver section of British Columbia on the West Coast. All the larger refineries are located so that they conveniently serve these main consuming territories.

Demand for Other Products

In regard to the demand for products other than gasoline any one considering the construction of a refinery in Canada will find it expedient to investigate markets for kerosene, fuels and other products for otherwise the plant operator may find himself with a satisfactory outlet for gasoline and no place to go with other plant products, except at prohibitive transportation costs.

The market for heavy residual fuel oils is largely confined to the marine trade. To serve this trade it is desirable to have bunkering stations at Montreal and points closer to the Atlantic Seaboard. Refiners with plants located at Toronto and even farther west in some cases have found it necessary to transport their heavy fuels East in order to obtain markets. Due to the competition of cheap coal it has not been possible to develop large outlets for fuel oil among the small industries although refiners are hopeful with the

TABLE 1—CRUDE RUNS TO STILLS AND OUTPUT OF REFINERY PRODUCTS IN CANADA

Crude Oil Runs to Stills—1931

(Data in Imperial gallons)*

	Domestic	Value	Foreign	Value
1931	49,668,529	$3,234,481	1,022,865,860	$42,931,043
1932	51,522,864	5,410,237	1,012,912,110	62,230,738

Output of Refineries, 1931

	Quantity	Value		Quantity	Value
Gasoline:			Fuel and gas oils:		
1931	469,136,132	$49,982,857	1931	427,246,567	$13,993,540
1930	445,599,417	60,789,572	1930	434,564,279	16,428,518
V.M.&P. or solvent naphtha:			Kerosene:		
1931	8,491,457	771,453	1931	39,465,559	4,130,082
1930	7,164,960	871,727	1930	43,606,881	5,391,852
Lubricating oils:			Grease (lbs.):		
1931	15,211,891	2,557,775	1931	9,390,866	187,216
1930	18,084,890	2,915,890	1930	13,465,366	268,453
Tar (bbls.):			Asphalt:		
1931	902,000	9,020	1931	37,937,082	1,836,403
1930	1,017,000	8,140	1930	37,470,666	1,991,629
Petroleum coke (tons):			Wax and candles (lbs.):		
1931	72,339	377,336	1931	10,097,369	368,677
1930	92,087	517,303	1930	10,153,924	453,591
Still gas (M cu. ft.):			Other products:		
1931	5,161,905	980,628	1931	230,165	.....
1930	3,529,319	874,151	1930	298,880	.....

All data compiled by Dominion Bureau of Statistics.

*The imperial gallon commonly used in Canada contains 277.274 cubic inches which compares with 231 cubic inches for the wine or American gallon. The usual trade comparison is to consider the imperial gallon one-fifth larger than the American gallon, or the latter five-sixths of the imperial gallon. By dividing the above imperial gallon figures by 36, the data can be changed to the American barrels with approximate accuracy.

TABLE 3—REFINERY PRODUCTION, IMPORTS, EXPORTS AND DOMESTIC CONSUMPTION OF PRINCIPAL PETROLEUM PRODUCTS IN CANADA

(Data in Imperial gallons)

	Fuel and gas oils	Gasoline	Lubricating oils	Kerosene
Production of refineries	428,246,557	469,136,132	15,961,224	39,465,559
Plus imports	89,528,171	116,712,705	13,778,816	3,666,437
	517,774,728	585,848,837	29,740,040	43,131,996
Less exports and re-exports	16,277,182	5,519,225	.....	505,606
	501,497,546	580,329,612	29,740,040	42,626,390
Plus decline in refinery stocks	.....	.....	.....	4,089,825
	501,497,546	580,329,612	29,740,040	46,716,215
Less increase in refinery stocks	13,633,340	15,852,709	491,882	.....
Apparent consumption	487,864,206	564,476,903	29,248,158	46,716,215
Stocks on hand, Dec. 31, 1931	61,941,557	71,486,846	3,818,813	6,867,025

TABLE 4—SEASONAL CONSUMPTION OF GASOLINE BY PROVINCES IN CANADA

(Data in thousands of Imperial gallons)

Month—	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Canada
January	27	666	329	3,829	13,794	1,333	2,535	2,329	2,869	27,711
February	25	636	222	3,267	12,567	1,266	2,390	2,798	2,663	25,834
March	24	612	292	4,121	11,083	1,529	2,629	2,545	3,215	26,050
April	196	1,272	830	7,401	14,641	2,303	5,123	3,755	3,694	39,215
May	339	2,205	1,568	9,608	24,853	3,137	5,761	4,601	4,254	56,326
June	372	2,423	1,770	10,343	23,990	3,185	4,942	4,299	4,220	55,544
July	454	2,683	2,112	12,149	31,536	3,392	4,801	4,717	4,951	66,795
August	487	2,875	2,237	12,494	27,165	3,598	5,303	4,508	4,763	63,435
September	407	2,405	1,879	10,920	29,366	3,467	5,279	3,383	4,276	61,382
October	284	2,229	1,716	9,766	22,934	3,057	5,632	3,114	4,096	54,828
November	236	1,847	1,337	8,103	20,964	2,356	3,131	3,126	3,314	44,414
December	171	1,337	728	5,607	16,651	1,685	1,919	2,303	3,054	33,455
Total	3,022	21,190	15,020	97,608	249,544	30,308	49,456	43,478	45,369	554,989

Note—The figures in the above tables have been compiled from data supplied by the provincial departments which administer the gasoline tax acts.

expansion of Canadian industry now under way that this condition can be changed. The fuels sold must have a low cold test for use over the greater part of the year.

In addition to cheap coal, the availability of cheap electricity from hydroelectric plants is an important factor in limiting the demand for all grades of petroleum fuels and kerosene. The steam plant demand for industrial fuel oil found in certain sections of the United States does not exist in that part of Canada where the bulk of the population lives. Electricity is used for heat and power in places where the cost would be prohibitive in the United States. An extreme example in Canada is the use of electricity for heating boilers reported in Ontario. The hydroelectric plants due to depressed business conditions have excess output and cases are cited where they are selling the excess electricity at special rates for the generation of steam. This is a temporary situation but illustrates the strong position of electrical competition in Canadian markets.

In addition to the cities and towns, low priced electricity has been made available to farms in parts of Ontario and Quebec in sufficient volume to restrict the demand for kerosene in the best agricultural section of Canada. In the isolated sections of Canada the demand for kerosene per capita is relatively high exceeding in some cases the gasoline consumption.

A substantial demand for kerosene and special distillates is afforded in the 60,000 farm tractors. Part of Canadian farming is carried on in large tracts where it is necessary to use motor-driven machinery of all kinds. This market is widely scattered, and to serve it necessitates considerable expense in marketing.

Certain oil companies are widening the demand for furnace oils this year by taking over the sale and installation of burners as well as the distribution of oils. In some sections they have the competition of natural gas, but it is believed that for the Dominion as a whole there is a large potential market. The greatest distribution at present centers in the cities of Toronto and Montreal. These two cities incidentally have 15 per cent of the entire population of Canada and are the centers of oil marketing.

The Imperial Oil Refineries, Ltd., refining subsidiary of the Imperial Oil, Ltd., (Standard Oil Co. of New Jersey), which has more than 50 per cent of the plant capacity in Canada with an equally strong position in marketing, is the only refiner of lubricating oils and wax. Several companies have facilities for compounding oils and greases. The Imperial manufactures motor oils and other lubricants for its Canadian distribution. Part of the wax output, including candles, has been sold in United States. The import tax which became effective in United States has made that market for wax less attractive.

TABLE 2—OPERATING REFINERIES IN CANADA†
(Data in barrels daily)

Company and plant location—	Crude oil capacity	Cracking capacity
Alberta		
General Petroleums, Ltd., Edmonton	*1,000	.....
Imperial Oil Refineries, Ltd., Calgary	5,000	3,800
Bell Refining Co., Ltd., Calgary	750	500
Maple Leaf Petroleum, Ltd., Coutts	5,000	.....
Northwest Stellarene Co., Inc., Coutts	1,500	1,000
Regal Oil & Refining Co., Calgary	3,000	.....
Total	16,250	5,300
*Under construction.		
British Columbia		
Imperial Oil Refineries, Ltd., Ioco	16,000	3,600
Home Oil Distributors, Ltd., North Vancouver	1,000	.....
Seaboard Oil & Refining Co., Vancouver	*3,000	.....
Shell Oil Co. of Canada, Ltd., Vancouver	*4,000	.....
Total	24,000	3,600
*Under construction.		
Manitoba		
North Star Oil, Ltd., Winnipeg	500	.....
Radio Refineries, Winnipeg	1,000	.....
Total	1,500	.....
Nova Scotia		
Imperial Oil Refineries, Ltd., Dartmouth	17,000	6,000
Ontario		
British American Oil Co., Ltd., Toronto	5,000	3,000
Canadian Oil Cos., Ltd., Petrolia	1,500	.....
Imperial Oil Refineries, Ltd., Sarnia	22,000	14,600
McColl-Frontenac Oil Co., Ltd., Toronto	10,000	4,000
Simrall Refining Corp., Amherstburg	2,500	.....
Total	41,000	21,000
Quebec		
British American Oil Co., Ltd., Montreal	8,000	5,000
Imperial Oil Refineries, Ltd., Montreal	30,000	8,000
La Salle Petroleum, Ltd., Montreal	2,500	.....
McColl-Frontenac Oil Co., Ltd., Montreal	8,000	4,000
Shell Oil Co. of Canada, Ltd.	*5,000	3,000
Total	52,500	20,000
*Under construction.		
Saskatchewan		
Imperial Oil Refineries, Ltd., Regina	7,200	4,500
Sterling Oil Refineries, Ltd., Moose Jaw	2,000	1,200
Total	9,200	5,700
Total Canada	161,450	61,600

†A small skimming plant is operated at Great Bear Lake by Imperial Oil Refineries, Ltd.

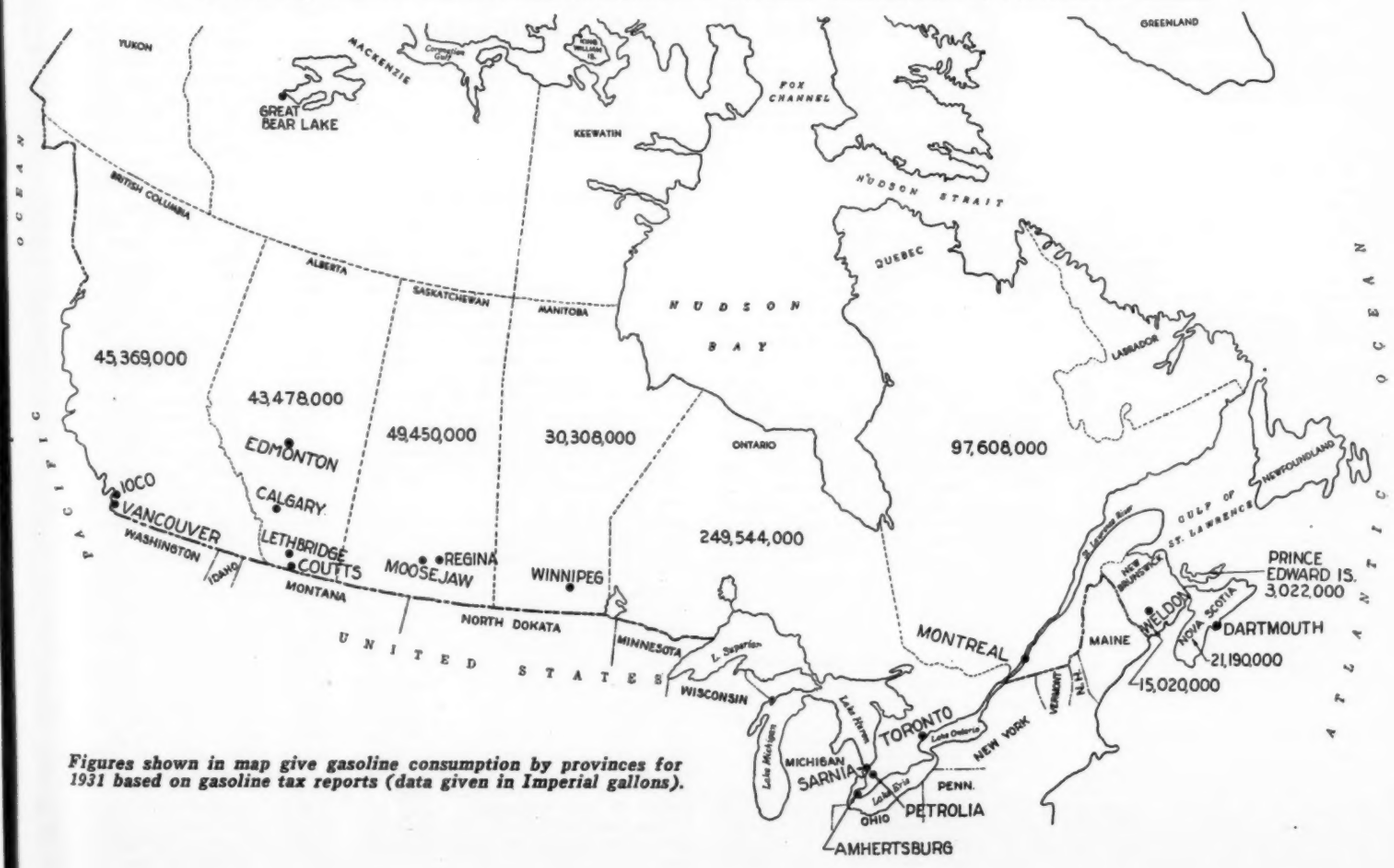
High Octane Gasoline

The distributor of motor fuels in Canada has strong competition as regards quality. Both from the standpoint of antiknock rating and volatility the gasoline sold in the Dominion is generally better than that in the United States. The three largest refiners in Canada—Imperial Oil, Ltd., McColl-Frontenac Oil Co., Ltd., British American Oil Co.—are now all selling a regular grade of gasoline containing tetraethyl lead in addition to the premium grades of Ethyl Gasoline, both grades being licensed by the Ethyl Gasoline Corp. The regular grade as sold by the three companies has an octane rating of 71 with a low distillation range, being especially desirable during the winter months when the more volatile motor fuels give the best service. These three companies have established a high standard for the regular grade of motor fuels which all distributors must approximate in specifications to maintain their gallonage. Due to this high octane and volatility standard emphasis is placed on cracking in refinery operations. All of the larger refineries and some of the smaller operators have well balanced cracking facilities.

The small topping plants obviously are at a disadvantage unless the operators can secure a crude oil which will give a straightrun gasoline of high antiknock rating. Such crudes are not obtainable in Canada and are difficult to secure in

(Continued on Page 31)

Map Showing Location of Petroleum Refineries and Gasoline Consumption by Provinces in Canada



Figures shown in map give gasoline consumption by provinces for 1931 based on gasoline tax reports (data given in Imperial gallons).

Full Text of Decision on Proration in East Texas Deals With Many Angles of the Situation

In view of the widespread interest in the three-judge Federal Court decision declaring void the orders of the Railroad Commission for proration in East Texas, the opinion is published in full:

In the District Court of the United States for the Eastern District of Texas, Tyler Division.—Peoples Petroleum Producers, Inc. vs. Lon A. Smith et al; Bill & Dave Oil Corp. vs. Lon A. Smith et al; A. S. Palmer et al vs. Lon A. Smith et al; Arthur F. Graf et al vs. Lon A. Smith et al; Alfred Macmillan et al vs. Ross S. Sterling et al; C. F. Smith et al vs. Ross S. Sterling et al; I. V. Holifield et vir vs. Railroad Commission of Texas et al. Before Joseph C. Hutcheson, circuit judge, and William I. Grubb and Randolph Bryant, district judges.

Hutcheson, circuit judge: At a former hearing of these causes, (except No. 432, [Holifield] which is being heard for the first time on the prayer for interlocutory and for final injunction), though the evidence of the enormous and constantly increasing disproportion between the allowed and the potential production in the East Texas Field, of its apportionment equally per well, regardless of capacity, the evidence of the powerful and unremitting pressure of the oil industry as a whole to limit the production of crude oil in Texas to the quota fixed by agreement to equal the demand for refined products which the market could absorb, and the evidence of the complacent, if not complaint, attitude of the commission toward this pressure and demand, caused us grave misgivings as to the correctness of our conclusion that upon the record they made, plaintiffs had not shown sufficiently to overcome their prima facies that the orders were unreasonable, drastic and oppressive as to them; that some other plan of regulated production in the field bringing about reasonable withdrawals of a considerably larger amount upon the basis of potential rather than per well would accomplish the permissible purposes of preventing physical waste without trenching upon the forbidden one of limiting production to market demand, we denied the temporary injunction. Because of these misgivings, however, we deferred decision on the merits until in the light of a full disclosure of field conditions it could be determined justly in a final way whether the orders complained of were in fact valid conservational orders as claimed by defendants, or invalid and oppressive attempts to limit production as claimed by plaintiffs. Constantin vs. Sterling, ——— Fed. (2d) ———.

Order Criticized

Thereafter, at a hearing held for the purpose of fixing new allowables for the Texas fields, the commission, over the protest and against the opinion of its advisers, and without any supporting evidence being offered, increased the East Texas allowable from 325,000 bbls. to 375,000 bbls. per day, offsetting the increase in that field, however, by a reduction of substantially the amount of the increase spread over the other Texas fields. The allowable for East Texas it arbitrarily apportioned as before equally per well among the more than 8,000 producing wells in that field, in entire disregard of the differences as to each well, in productive capacity, situation on the structure, thickness and character as to richness and yield of the underlying sands and proximity to water.

Apparently designed to placate protestants in the East Texas Field who were claiming that the program of restriction was bearing too hardly on that field, and not hardly enough on other fields, the action pleased no one; neither the industry, which had been pressing for still further reductions in East Texas, and which vigorously condemned the increase, nor, because of the smallness of the increase, the contesting producers. Amended complaints were filed against the orders, in which persisting in the claim made on the former hearing that by fixing a top allowable for the field as a whole, no matter how many wells were drilled, and arbitrarily apportioning it equally on a per well basis, in disregard of the differences in capacity and in field location of the wells, and of the grossly inequitable result of such apportionment, they neither are nor were intended to be conservation orders to prevent physical waste of natural resources, but economic orders to keep the supply of Texas crude oil within the compass of the existing demand for it, plaintiffs again asserted them to be invalid, as an exertion of power forbidden by statute to the commission, or, if generally within the authorization, as such an excessive and unreasonable exercise of the power they purport to execute, that transcending public necessity, they assume the character of a mere arbitrary fiat. Constantin vs. Sterling, supra.

Issues Joined

Defendants joining issue the causes stood for trial together as one cause, the parties agreeing that each presented substantially the same question of law and fact, and that the same decree should be entered in each.

Upon the issues thus joined, plaintiffs and defendants offered a mass of testimony, both fact and opinion, as to the nature, character and extent of the field; of the oil-bearing sands, the edge and bottom water; the gas free and in solution; whether the oil comes to the wells water driven or gas borne; the reservoir content; its possible and probable yield, and the best methods to obtain the largest yield; the causes of waste, and methods to prevent it, and how these are affected by present and proposed methods of regulations; as to field conditions generally and as regards plaintiff's wells; the relation between plaintiffs' wells and other wells in the field; and the relation which the commission's orders bear to the prevention of waste in and ultimate recovery from the field generally and from plaintiffs' wells. Factual data as to physical conditions in the East Texas Field disclosed by official core records from many wells, and tests made there, were interpreted, supplemented and theorized upon in the testimony of witnesses who had had practical or theoretical experience, or both, in that field. This testimony, supplementing that produced on the former hearing, presents in a full, complete and final way the case on the facts for plaintiffs, and for defendants.

Power of Commission

We have repeatedly, and without varying, held that the state may, in the interest of the conservation of its natural resources provide by legislation within constitutional limits for the regulation of the drilling for, the production and the marketing of, oil to prevent waste; that it may constitute the commission statutory agent of the state, and may delegate to it authority to make within the limits of the grant of power just and equitable rules and regulations to effect these ends. We have also held that in the act of appointment, the legislature has strictly defined and limited the powers of the commission. Macmillan vs. Commission, 51 Fed. (2d) 400; Henderson vs. Commission, 56 Fed. (2d) 218; Constantin vs. Smith, 57 Fed. (2d) 227. In Constantin vs. Sterling, —— Fed. (2d) ——, we carefully examined the statutory provisions against waste contained in the present statutes, which are set out in a note to that opinion, and found nothing in them which contemplated, required, or permitted either unreasonable or unjust restrictions upon production.

We found upon the contrary, that while allowing the commission to make orders prorating production from a pool if necessary to prevent waste, they in terms required the apportionment to be made among the wells as the facts justly and equitably required. We accordingly found the statutes valid against attack. No case has been called to our attention, and we have found none, which requires modification of these views, and we again find the statutes valid. It remains only to inquire whether, tested by the principles announced in those cases, and particularly in the last case referred to, a case is made out here entitling plaintiffs to relief on the ground that the orders are not within the powers granted to the commission, because, contrary to the statutory prohibition, they are designed and effective to prevent economic waste by limiting the production of oil to equal the existing market demand, or though designed to prevent physical waste they operate unjustly and inequitably, because discriminatory, or excessively, because beyond what the public necessity requires.

Opposing Theories

The facts are without conflict; a brief summary of them will suffice. The conflicts arise entirely from the contrary theories advanced by the experts on each side in support of their respective contentions as to the effect on physical waste of present and proposed methods of controlled production; on the part of plaintiffs, that the orders, by their unreasonable restriction on production, both in the matter of limited amount, the method of distribution, and the disregard of gas-oil ratio, create, they do not prevent, waste; on the part of defendants that by utilizing the water drive, they do. The rate of withdrawal of the oil, the rate of its replacement by water, and the effect it is having and will have on ultimate recovery, are matters on which there is great conflict of opinion. The commission's experts asserting the field to be water driven, and that it should be produced so as to maintain a continuous follow up of the water, contend that the present restrictions produce that result. Plaintiffs' witnesses testifying that the oil is gas driven, and that no such orderly and continuous follow up of the water as defendants' witnesses speak of, is necessary, or is or can be maintained, declare that the present method not only greatly injures plaintiffs but if continued, will cause great waste and loss in the field.

It is here, as to the production methods most suitable to prevent waste, that the theorizing opinions of the witnesses differ most radically. In fact, so radical are

Texas Will Ask a Stay of Execution in Case Against Railroad Commission

AUSTIN, Tex., Oct. 31.—The State today prepared to ask a three-judge Federal court to enter a stay order suspending the effect of its recent decision holding invalid orders of the Texas Railroad Commission by which the commission sought to regulate oil production in the East Texas Field.

Maurice Cheek, assistant attorney general in charge of oil litigation involving the commission, said he would ask the court to stay its decision until the U. S. Supreme Court had passed on another Texas suit involving the theory of state proration — the Macmillan case — now pending before the nation's highest tribunal. Mr. Cheek was of the opinion the decision in the Macmillan case would have a direct bearing on issues involved in the case recently decided, brought by Peoples Petroleum Producers, Inc., and others against the commission.

In both cases, he said, the lower Federal court held against the orders of the commission on the ground the regulatory board exceeded its statutory authority and considered economic factors and market demand in arriving at its oil production allowables. The statute restricts the commission to issuance of orders designed solely to prevent or minimize physical waste.

Macmillan Case Up November 8

The Macmillan case has been set for submission in the supreme court on November 8. Cheek said attorneys had agreed on November 21 for submission, and he has asked the supreme court to revise its setting.

Decision to ask for a stay order followed a conference between Cheek and the Railroad Commission. It will be presented to the three-judge court when attorneys confer with the judges prior to entering the decree carrying out the court's decision.

Cheek said he would file a motion for rehearing in the People's Petroleum Producers' case when the conference is held on the decree.

Sterling Continues Delay

Meanwhile, Gov. R. S. Sterling continued to delay issuing his call for a special session of the legislature to enact laws to give the commission more power to effectively regulate oil production. Governor Sterling said he would await developments. He had expressed belief that a special session might not be necessary and any revisions needed to protect the State's natural resources could be made at the regular session of the legislature meeting in January.

The commission has scheduled a hearing for Thursday to take testimony on which to base an order for substitution for the one declared invalid by the Federal court. Pending the hearing and promulgation of the new order, the commission did not make its usual 15-day per well adjustment in the East Texas Field.

Under the current order, production is adjusted each 15 days within a daily top field allowable of 335,000 bbls., each well contributing an equal share to the field total. The present production is limited to 40 bbls. per well per day.

Ordinarily the adjustment would have been made tomorrow. On the basis of 8,762 wells in the field, the per well allowable would have been reduced to 38 bbls. during the 15-day period starting tomorrow, R. D. Parker, director of the oil and gas division of the commission, said.

The Railroad Commission today continued the East Texas 40 bbls. allowable, pending the hearing November 3 and new order.

their differences and so contrary their opinions, so voluble, so volatile are most of the witnesses in advancing them, and so equal are they all in cocksureness, that form of knowing which easily mistakes certitude for certainty, that if we assume, as we suppose on this record we should, them all, to have equal theoretical knowledge and an equal absence of intention to deceive, the theories as such might best be held to counterbalance, leaving the question of the validity of the orders to be determined not upon disputed theories, but by a consideration of the physical facts and their admitted consequences, and the commonsense conclusions which that consideration compels. For though we are of the opinion that the theories advanced by the defendants' witnesses to support the commission's orders, coercively drastic as they are, even if the theories are sound, and ruinously so if they are unsound, are completely overthrown as theories by the testimony of plaintiffs' theorists, we think that too little is definitely known about these theories and there is too large a body of undisputed physical fact to permit opinion evidence to determine, either before the commission or us, the real and substantial rights here in question.

The East Texas oil field is 4 or 5 miles in width, and 35 to 40 miles in length. Underlying its area of 120,000 acres is a great reservoir containing, it is estimated, some 6,000,000,000 bbls. of oil. All agree that less than 50 per cent, the estimates varying from 35 to 40 per cent, of this oil is recoverable by any method now known. So far 200,000,000 bbls. have been withdrawn.

Lifting Energy

All agree that close spacing of wells and some system of ratable production which will best utilize the propulsive and lifting energy stored there will give the greatest yield. All agree that the rules enforced by the commission require wide spacing, prevent ratable taking, and have the immediate, obvious, and, plaintiffs say, the sole tendency and effect of restricting production from the field. On the west side of the field is "edge water," underlying the west half is "bottom water." No water underlies the east half. Slowly but perceptibly water is rising in the west part of the field. The commission's experts are of the opinion that the water is replacing the oil substantially as withdrawn. Plaintiffs' witnesses are of a contrary opinion. They say that the water is lagging far behind, and that only 60,000,000 bbls. have come in. All agree that within time every barrel taken out will be replaced by water, regardless of what method of production is used. Upon the issue that the orders look to economic, rather than physical ends, plaintiffs proved by testimony and charts the relation between the supply and the price of crude and refined oil products.

Complainants' wells are nearly in the middle of the field, with oil saturated sands of the maximum thickness, but no water underlying, and they can produce large quantities of oil without waste. The oil-producing sands to the east of plaintiffs' property are of continually decreasing thickness pinching out to nothing on the east edge of the field. None of the wells lying between plaintiffs' property and the eastern edge of the field is capable of producing nearly as much oil as plaintiffs' wells unless by artificial methods of restriction such as the commission is now requiring, plaintiffs' production and that of others similarly situated is cut down for their benefit. The potential capacity of the 8,000 or more wells in the field varies from 200 bbls. and less per day in some to 30,000 bbls. in others. The wells having the largest potential capacity will naturally, if left alone, produce the greatest amount of oil. If the field is produced in an orderly manner, and as near ratably as may be, each person withdrawing the oil underlying his land, and that which can be brought to his wells by proper production methods, each well will produce in accordance with the advantage of its situation. Whereas, if the present condition is maintained, plaintiffs will lose oil to which they are entitled to the wells on the east and long prior to the exhaustion of the oil and gas in the reservoir, the rise in the water will saturate plaintiffs' wells, drowning them out, and the sands lying to the east will produce the oil which has been driven from plaintiffs' lands to them. The evidence is conclusive that the commission has never made experiments, tests or inquiries to ascertain the greatest amount of oil which each producer may take from his wells without injury to the field, and that it has never encouraged nor indeed permitted, such inquiry or test as, in carrying out the legislative policy of supervising production to prevent physical waste, it ought to have done. On the contrary, it has prevented such tests.

Market Demand

It is further conclusive that the allowable has always been fixed, either finally or tentatively, as the figure which will keep production in Texas within the amount fixed by agreement of the Oil States Advisory Committee and those working with it, or as one of the witnesses, Roeser, puts it, "the amount the market can absorb," and it has been only to support this fixation that opinion evidence has been marshaled post hoc in support of the claim that the allowable as fixed, will prevent waste. This evidence, in the form of speculative theories changing from time to time, and vigorously challenged as unsound, does not in our opinion, give the claim even the appearance of verisimilitude.

Plaintiffs say that this is the Macmillan case again greatly strengthened; that the evidence here, even more than it did there, compels the conclusion that the commission is undertaking not to prevent physical waste, but to limit production to demand; that here the action is more flagrantly illegal and oppressive because there the prohibition which we found ignored was implied, here it is expressed; that there the theories behind which the commission masked its forbidden purposes were still unexploded theories, here the evidence entirely discredits and explodes them. They say further, that if, notwithstanding the case upon the facts in testimony, and those of which the court takes judicial knowledge, make plain to the court what all men know, that the commission has never wavered from its steady purpose to do in the interest of oil stabilization the things forbidden to it, the court is still of the opinion that it may not find the purpose except in the operation and the effect of the act, the testimony compels the finding that the commission's orders have no real relation to the prevention of physical waste, but on the contrary, tend to cause it. That if it be considered that the orders have some slight tendency to prevent waste, this tendency is so slight and is accomplished as the price of such drastic, excessive and unnecessary restriction upon the right of private use, that the orders must be held to be confiscatory, as mere arbitrary fiats.

Orders Rejected

And finally, that in any event the apportionment of the production equally per well, instead of in accordance with each well's potential capacity is so patently inequitable, unjust and confiscatory, and so directly in the teeth of the statute, that the orders may not stand. Plaintiffs say, in short, that the commission is "running the public interest argument into the ground" by in effect "taking over the entire management of plaintiffs' properties and running them at the expense of the owner," (Wolfe vs. Industrial Court, 262 U. S. 539) and this not in the interest of the general public, as the legislature understood and declared it, but as that interest has been interpreted by that part of the public which, desiring oil stabilization on the basis of higher prices for both crude oil and its refined products, wants and will have limited production in Texas and elsewhere, and that against such unauthorized action, no matter how wise and benevolent in purpose it may intrinsically be, plaintiffs should have their injunction.

In considering the evidence in this case we have not been at all unmindful of the fact, constantly pressed upon our attention throughout this long controversy, that, though the legislature has declared that "the commission shall not have power to attempt by order or otherwise, directly or indirectly, to limit the production of oil to equal the existing market demand for oil, and that power is expressly withheld from the commission," there is a large body of opinion shared in to some extent by at least some of the members of the commission (Macmillan and Constantin cases, supra) that it would be a most desirable thing if the commission within the limits of the law, could accomplish what the legislature has forbidden, and that there are many who conscientiously believe that if the restraining hand of the commission is withheld from keeping supply within the compass of demand, wide open and flush production, with resulting waste both economic and physical, will ensue. Nor have we been unmindful of the counter contention, that the commission must be most rigidly held to the legislative policy which the statute declares, nor only because that policy is consistent with the long established policy of the state toward artificial price raising, indeed, with the genius of its people, but because, if the attention of the commission can be entirely distracted from limiting the supply of oil to market demand, and centered upon a real effort to ascertain the sources and causes of physical waste, with the idea of instituting regulations designed to assist operators in preventing it, and not, as now, to taking over from them the management of the field, the enlightened self interest of the producers in East Texas can be counted upon to devise ways and means of obtaining the greatest ultimate yield from it.

Not Within Power Granted

Considerations of this kind, however, may be entertained by us only as they throw light upon the motives, the actions, the testimony and the contentions which we are to review. They may not, except for this limited way, influence or guide our decision. For in a controversy of this kind between one who owns property by a title which carries the right to use it, and a regulating body undertaking to impose limits on that use, the statutes themselves being valid, we have only one inquiry, whether under the facts the orders entered are within the grant of power.

We have carefully considered the evidence in this case, illumined as it is by the long record, the history of which the cases cited supra give, of the settled purpose, the achieved result, of controlling the supply of crude oil to keep it within market demand, and we think it cannot be reasonably doubted that the orders are void as directly in the fact of legislative prohibition.

We find no support whatever in the evidence for the view that the amount of the allowable was fixed upon, a real and primary consideration of, or is supported by, any reasonable or credible evidence that it will, or will tend to, prevent physical waste. On the contrary, we think that no reasonable mind could believe or conclude that the orders as entered were either designed to, or do, have any real relation to the public necessity to conserve oil against physical waste. We therefore find here, as we did in the Macmillan case supra, that "under the

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Engineers Studying Plans for Equitable System of Proration in East Texas

By L. E. BREDBERG

FORT WORTH, Tex., Oct. 31.—Changes in the method of prorating wells in the East Texas Field are to be advocated at the hearing to be held by the Railroad Commission at Austin on November 3, the present per well basis having been judged unjust and confiscatory by the three judge Federal court which handed down a decision on proration in the field on October 24. It is not known just what method will be considered as the most useful and wise for the field, but engineers for the commission are studying a zoning plan in which the acreage and bottom hole pressure will be used if it proves adaptable and is accepted by the commission.

Other plans have been considered, but do not seem feasible for the East Texas Field which offers more complicated problems than the majority of other fields in the State, principally due to its size, and also because of the many hundreds of producers, and small tracts in the field.

The acreage basis has heretofore been advocated, but it has been unworkable in the East Texas Field, while the acreage and potential combined plan has also been judged unfit, proration on potentials alone being given no consideration whatever.

The Van Field, in Van Zandt County, East Texas, is prorated on the sand thickness basis, but due to the fact that records have not been kept on all wells in the East Texas Field, and the sand body is not solid, determinations would be difficult to make in this field for proration purposes. These various methods, however, will probably all be given hearings at the meeting in Austin on November 3.

Macmillan Decision Important

One thing is possible, but not probable, in regard to preventing the necessity of a change in proration methods in the field, and that is the reversal of the district court's decision by the Supreme Court in regard to the Macmillan injunction suit which was granted in August, 1931, and which will come up for resubmission on November 21. The Supreme Court is not expected to reverse the lower court's decision in that case, which decision was similar to the one just handed down in the Constantin-Wrather case against the commission.

Immediately after the decision was handed down in the latter named case several operators opened their wells on several leases in the field, and started producing at the limit. This was short lived, however, Railroad Commission men, state rangers and guardsmen acting immediately to shut in these wells. The governor has apparently made up his mind to prevent an occurrence such as happened in June and July of 1931. The national guard forces have been augmented in the field, and more rangers have also been sent to keep the situation well in hand.

Commissioners Want New Law

Calling of a special session of the legislature immediately to sustain proration in Texas oil fields was declared "highly important" today by E. O. Thompson, member of the Railroad Commission.

Amendment of the Texas oil statutes to give the commission authority to consider economic waste in the manner of the Oklahoma law, which has been upheld by the U. S. Supreme Court in an unanimous decision is recommended by Thompson.

C. V. Terrell, chairman of the commission, has also stated that a special session to correct flaws found by a three judge Federal court decision is of paramount importance to the State and oil industry.

Thompson was in Fort Worth today to sit with other commissioners tomorrow at a hearing on gas rates.

Wednesday the commission is scheduled to hear protests from producers in the Crane-Upton Pool on the recent order which lowered allowable from 16,700 to 7,700 bbls. daily. The method of distributing allowable in the Winkler County Pool also will be considered Wednesday by the commission.

Argentina and Italy Developing Their Refining Facilities to Supply Big Part Local Needs

By SPECIAL CORRESPONDENT

The petroleum refining industry of Aregntina, during recent years, has been developed to a point where it supplies 68 per cent of the local gasoline demand, in contrast with the 25 per cent supplied in 1926, and, given adequate tariff protection, could, according to local authority, meet the entire Argentine demand for gasoline and kerosene. Local production of crude oil, however, would not be sufficient immediately for such expanded refining and a substantial portion of the throughput would have to be imported.

Enrique P. Canepa, an Argentine petroleum engineer who has visited many of the oil centers of the United States in connection with his work for the Argentine government oil fields operations, has written for the local press that Argentine refineries, if operated intensively, are of sufficient capacity to supply the country's needs for gasoline and kerosene and that such intensified operations would follow if the Argentine gasoline tariffs were increased sufficiently. Quantitatively, he has stated that 5,470,000 bbls. of gasoline and 1,155,000 bbls. of kerosene could be produced annually in the South American republic.

During 1931, Argentine refineries produced approximately 3,600,000 bbls. of gasoline, a small decrease from the 1930 output, but gasoline imports dropped from 2,139,000 bbls. in 1930 to 1,711,000 bbls. in 1931, the lowest figure for Argentine gasoline imports since 1924. Local refineries supplied 68 per cent of the gasoline demand, as compared with 15 per cent 10 years ago when a few small plants comprised the country's refining industry.

Other Gains Recorded

Kerosene production increased from 662,390 bbls. in 1930 to 741,240 bbls. in 1931, while kerosene imports decreased from 453,400 bbls. in 1930 to 324,200 bbls. in 1931. Of the 1931 imports, 214,720 bbls. was received from Mexico and 119,480 bbls. from the United States. Local production supplied 75 per cent of the 1931 kerosene demand, calculated at 1,065,440 bbls., as compared with 24 per cent 10 years ago.

A gain also was recorded in the output of fuel oil, the production increasing from 6,927,960 bbls. in 1930 to 7,490,555 bbls. in 1931, while imports declined 714,278 bbls., or from 5,794,626 bbls. in 1930 to 5,080,348 bbls. in 1931. Argentine refineries supplied 60 per cent of the local fuel oil demand during 1931, as compared with 22 per cent 10 years ago. Approximately 80 per cent of the Argentine fuel oil imports are received from Venezuela and the Dutch West Indies; 10 per cent from Mexico; and 5 per cent each from Colombia and the United States.

The largest of the Argentine refineries is that of the Y.P.F., or Government Oilfields, at La Plata, about 40 miles from the federal capital. Its capacity is rated at slightly better than 15,000 bbls. daily. Placed in operation on March 25, 1926, it was operated for nearly a year by the construction company before being formally taken over by the Argentine government. For the first three years, operations were limited to straight distillation, but a Cross cracking plant was completed and placed in operation during 1929. The refinery operates principally on crude oil from the government's operations in the Comodoro Rivadavia Field, supplemented by a smaller amount of lighter crude from Plaza Huincul.

The Y.P.F. also operates smaller refining plants at Comodoro Rivadavia and Huincul. The Comodoro Rivadavia plant, located in the field several hundred miles south of Buenos Aires, dates from May, 1915, when a small topping plant was completed. Previously, the only refining operation in the field was the distillation of sufficient crude to provide fuel oil for the fleet. The plant has been increased in capacity until, at present, better than 2,000 bbls. daily are treated. A lubricating oil plant was added in 1926. The Plaza Huincul refinery was started on November 15, 1918, using a small quantity of oil from the No. 1 well completed during the preceding month. The present plant was built in 1920.

Large Private Plant

The largest private refinery in Argentina is that of the Compania Nacional de Petroleo, Ltd., at Campana, about 50 miles from Buenos Aires, with a daily capacity of about 10,000 bbls. It operates partially on Argentine crude produced at Plaza Huincul and in Salta and on crude oil imported from Peru. This plant was established in 1905 by a group of Argentine business men, headed by Emilio O. Schiffner. In 1911, when the West India Oil Co. was established and took over the sale of the plant's products, the company was enlarged. In 1917, the West India Oil Co. contracted for the operation of the refinery and cracking equipment was added shortly thereafter. The Compania Nacional de Petroleo also operates a refinery at Bahia Blanca, some distance south of Buenos Aires, with a capacity of about 2,500 bbls. daily. Crude oil from Plaza Huincul is refined at this plant.

Second in size among the private refineries is that of the Diadema Argentina, a Royal Dutch subsidiary, at Dock Sur in Buenos Aires. The plant was placed in operation on May 9, 1931. It has a capacity of about 6,000 bbls. daily and runs on local crude produced in Comodoro Rivadavia by the Royal Dutch producing companies, the "Diadema Argentina," "Perla," Antorcha Argentina," "Brillante," and "Rubi." The plant is equipped with Dubbs cracking units.

The English railway companies operating in Argentina produce about 3,000 bbls. daily and operate a 2,500-bbl. refinery at Comodoro Rivadavia through the Compania Ferrocarrilera de Petroleo, or Railroad Oil Co. The operation was inaugurated to furnish the railroads jointly with fuel oil. The excess crude production is shipped to the government refinery. The plant is equipped for cracking.

La Plata also is the site of the "Itaca" refinery, with a capacity of better than 1,000 bbls. daily, operates on local crude. It is reported that plans for modernization and enlargement will increase the plant's capacity to approximately 4,000 bbls. daily. This plant, also, is equipped for cracking.

Two Standard Plants

The Standard Oil Co. of Argentina operates two small plants, one a topping plant of about 120 bbls. daily capacity at Plaza Huincul and the other a topping plant of about 500 bbls. daily at Embarcacion, in the northern province of Salta. Both plants are nearly 800 miles from Buenos Aires. Each operates on crude oil obtained from nearby concessions and the products of both are sold by the West India Oil Co.

The plant of "La Isaura" at Bahia Blanca, about 400 miles south of Buenos Aires, has a capacity of about 600 bbls. daily and operates partly on crude oil from Plaza Huincul and partly on imported oils.

"El Condor" possesses three plants in the vicinity of Buenos Aires, only one of which is being operated. This is the plant at Avellaneda, separated from Buenos Aires by the small stream, Riachuelo, which marks the boundary of the federal capital. This plant treats about 40 bbls. daily of imported crude, while two other plants of about the same size are operated only intermittantly.

A number of other small refining plants are located in various parts of Argentina. One of these is the "Lottero" topping plant near Buenos Aires, which treats 15 bbls. daily of Peruvian crude. In the province of Mendoza, more than 700 miles from Buenos Aires, a small topping plant of about 20 bbls. daily capacity is operated at El Sosneado for the production of lubricants. Crude from local wells is utilized. Other small plants, closed at present, are "El Fenix," at Avellaneda, with a capacity of about 10 bbls. daily; "Icarbone," in Buenos Aires, with capacity of about 8 bbls. daily; "Quellet" in Mendoza, with a capacity of nearly 20 bbls. daily; and "Cacheuta" at Kilometer 32 of the Transandine Railroad, with a capacity of 6 bbls. daily.

Several of the smaller plants in the Argentine, such as the railroad companies and "La Isaura" are reported to have in mind the ultimate installation of cracking equipment.

Situation in Italy

With a refining program based almost exclusively on the cracking of imported fuel oils, Italy is writing an unusual chapter in the record of foreign countries which are engaged in developing a local supply of petroleum products. Definite accomplishment is indicated by recent official Italian statistics which show that local refinery production during 1931 supplied 26.6 per cent of the Italian gasoline demand, as compared with 3 per cent in 1926, and that imports furnished 73.4 per cent of the 1931 supply, as compared with 97 per cent in 1926. Despite an increase of 767,746 bbls. in Italian gasoline demand in 1931, as compared with 1929, gasoline imports were 197,367 bbls. less. The increased refinery output of 948,932 bbls. more than took care of the increased consumption.

Italian refineries during 1931 produced 1,129,225 bbls. of gasoline, an increase of 421,235 bbls., or nearly 60 per cent, over the 1930 output. The 1931 gasoline production was 20 times greater than that of 1926 and six times that of 1929. Cracking plants accounted for 75 per cent of the gasoline output. Local estimates, based on operations during the first four months, indicate that Italy's 1932 gasoline production will approximate 1,530,000 bbls., or 35 per cent more than that for 1931. Plans for doubling the capacity of the major plants indicate that an annual production of 3,000,000 bbls. of gasoline is the present objective.

Consumes More Gasoline

The Italian domestic demand for gasoline has increased annually in recent years, being in 1931 5 per cent greater than in 1930 and more than twice that of 1926. Imports of gasoline increased sharply from 1926 to 1929, but have since declined slightly.

The largest of the Italian refineries is that of the Societa per la Industria del Petroleo (Royal Dutch-Shell), located at Migliarina in the commune of Spezia. The plant was completed and began operations in November, 1929. It is equipped with Dubbs cracking units and operates on Rumanian fuel oil of about 24° A.P.I.

The cracking plant of the Societa Anonima Benzina Italiana (Benit) is located in the industrial district of Naples. This plant operates on Russian fuel oil and processed about 350,000 bbls. during 1930, producing about 135,000 bbls. of gasoline, 160,000 bbls. of fuel oil, and 21,000 bbls. of Diesel oil. The plant is controlled largely by the Compagnie Financiere des Petroles, of Brussels, commonly known as "Petrofina."

The cracking plant of the Distillazione Italiana Combustibili, S.A., is located at Porto Marghera (Venice). This is strictly an Italian company, the capital, management, and employes all being Italian. After experimenting with different processes, the company decided to install a Dubbs cracking unit of 800 bbls. daily capacity. This was completed early in 1931 and a second unit was ordered subsequently.

Government Interested

The Italian government is interested officially in the Italian oil industry through the Azienda Generale Italiana Petrolio (Agip), which operates the former plant of the Raffineria di Olii Minerali, S.A. (Romsa), in the western outskirts of Fiume. The plant was erected by Hungarian capitalists about 1900 and bought by the "Agip" in 1926. The old equipment was replaced in 1925 and 1926. It is reported to be equipped with a Holmes-Manley cracking unit.

The "Agip" plant, as well as that of the Raffineria Triestina, S.A., at Trieste, operates on imported crude. The latter plant produced lubricating oils chiefly. During 1930, the two plants refined about 700,000 bbls. of crude, producing 148,000 bbls. of gasoline by straight distillation, to which the "Agip" cracking unit added 108.000 bbls. through processing approximately 193,000 bbls. of unfinished oils.

The Raffineria Italiana Olii per transformatori in Vado Ligure, province of Savona, processed 35,000 bbls. of Russian solar oil, producing white paraffin oil for industrial use and heavy transformer oil.

The local Italian production is refined in three small topping plants in the general vicinity of Parma. The Societa Petrolifera Italiana (Standard Oil Co. of New Jersey) operates a modern topping plant at Fornovo Taro, using crude oil from the Valezza Field, about 20 miles southwest of Parma. The S. P. I. also has production in the Salsomaggiori Field, about 18 miles west of Parma, where a small plant produces kerosene for local use. The S. A. Petroli d'Italia has a small topping plant at Fiorenzuola d'Arda, about 30 miles west of Parma, also operating on locally produced crude.

The probable influence of future oil production in Iraq is associated with the Italian oil industry through the ownership by the "Agip" of a 25 per cent interest in the British Oil Development Co., whose ownership is divided between British, French-Swiss, Italian and German interests. This company completed an agreement with the Iraq government on April 20, 1932, for an oil concession on the opposite side of the Tigris River from that of the Iraq Petroleum Co.

ITALIAN GASOLINE STATISTICS, 1926-31
(Barrels of 42 gallons)

Year—	Production	Imports	Exports	Domestic demand
1926	56,363	1,842,681	1,827	1,897,217
1927	148,656	2,173,509	2,864	2,319,301
1928	120,368	2,742,576	11,033	2,851,911
1929	180,293	3,287,604	15,181	3,452,716
1930	707,990	3,313,053	14,526	4,006,517
1931	1,129,225	3,108,237	17,000	4,220,462

World Gasoline Trade Shifting With Protective Legislation by Various Countries a Factor

By A. E. MOCKLER
New York Bureau, The Oil and Gas Journal

NEW YORK, Oct. 31.—Gasoline production and consumption totals of the world are undergoing major revisions as a result of protective legislation which is fostering the construction of refineries in consuming countries, and the enforced use of gasoline substitutes and blends in many important consuming countries, it is disclosed in an exhaustive summary of the world's gasoline trade in 1931, just completed by V. R. Garfias and R. V. Whetsel of the foreign department of Henry L. Doherty & Co.

The study goes into the effects of the recently imposed import duty on gasoline by the United States in detail, and indicates that in the process of the rearrangement of gasoline shipments as a result of this tariff, motor fuels from refineries formerly shipping to the United States will now go to world markets, displacing to an almost equal volume quantities of gasoline formerly shipped to world markets by refineries in the United States.

The survey, in detail, follows:

The world production of gasoline in 1931—which corresponds to nearly 40 per cent of the crude oil production—is estimated at 561,000,000 bbls. or only about 5,500,000 bbls. in excess of consumption. Of the total, 72 per cent was consumed in the producing countries, and 28 per cent was exported. The 10 ranking countries in the production and consumption of gasoline were the following:

GASOLINE PRODUCTION

	Production (in barrels)	Per cent of world production
United States	441,340,000	78.6
Russia	19,740,000	3.5
Dutch West Indies	16,552,000	2.9
Canada	12,997,000	2.3
Dutch East Indies	12,993,000	2.3
Rumania	12,100,000	2.2
Persia	10,572,000	1.9
United Kingdom	5,300,000	0.9
Mexico	4,214,000	0.8
Argentina	3,780,000	0.7
Others	21,808,000	3.9
	561,396,000	100.0

GASOLINE CONSUMPTION

	Consumption (in barrels)	Per cent of world consumption
United States	405,113,000	72.9
United Kingdom	28,200,000	5.1
France	19,165,000	3.4
Canada	15,792,000	2.8
Germany	14,000,000	2.5
Australia	6,095,000	1.1
Russia	5,400,000	1.0
Argentina	5,383,000	1.0
Japan	5,125,000	0.9
Italy	3,541,000	0.6
Others	48,015,000	8.7
	555,829,000	100.0

The following were the ranking countries in 1931 as importers and exporters of gasoline:

GASOLINE IMPORTS

	Imports (in barrels)
United Kingdom	26,252,000
France	18,575,000
United States	13,621,000
Germany	11,417,000
Australia	5,436,000
Spain	3,332,000
Holland	3,272,000
Others	45,890,000
	127,795,000

GASOLINE EXPORTS

	Exports (in barrels)
United States	45,832,000
Dutch West Indies	17,038,000
Russia	15,150,000
Rumania	12,843,000
Dutch East Indies	10,929,000
Persia	10,271,000
Others	15,732,000
	127,795,000

It will be seen that the United States is the only country appearing as both importer and exporter.

Gasoline Trade Zones

In order to present a clear idea of the trend of the gasoline trade, it has been decided more or less arbitrarily to subdivide the market into the four zones according to geographical location and transportation facilities:

The North American zone including the United States, Canada and Mexico; the South American zone comprising South and Central America and the West Indies; the European zone covering Europe, Asiatic Russia and countries of the Near East and North Africa bordering the Mediterranean; and the Oriental zone including countries of the Orient, New Zealand, Australia and islands of the Pacific and Indian Oceans.

North American Zone

The refineries in the United States, Canada and Mexico produced 81 per cent, while these countries consumed 76 per cent of the world's total in 1931. This zone supplied close to 24 per cent of the requirements of the South American zone, about 33 per cent of the European zone and approximately 31 per cent of the Oriental zone. The 1931 production and consumption of gasoline in the North American zone by countries was:

	Production (in barrels)	Consumption (in barrels)
United States	441,340,000	405,113,000
Canada	12,997,000	15,792,000
Mexico	4,214,000	1,560,000
North Amer. zone	458,551,000	422,465,000

The United States, by far the leading factor in the world's gasoline trade, not only supplied its own needs but about 21 per cent of the demand of the rest of the world.

South American Zone

Close to 27,000,000 bbls. of gasoline were produced and about 13,000,000 bbls. consumed within this zone. Exports were about 17,000,000 bbls., 70 per cent of which went to the United States and the balance to Europe. Imports totaled approximately 3,000,000 bbls. mostly from the United States. The leading refining centers and the largest consuming countries in the South American zone follow:

	Prod. (in bbls.)	Consumption (in bbls.)
Dutch West Indies	16,552,000	154,000
Argentina	3,780,000	5,383,000
Peru	2,600,000	392,000
Trinidad	2,007,000	150,000
Venezuela	1,284,000	1,031,000
Others	986,000	6,334,000
S. American zone	27,209,000	13,444,000

European Zone

The refining centers of Russia, Rumania, United Kinkdom, Poland, Germany, Egypt and others of less importance are located in this zone. Their gasoline production totaled about 46,000,000 bbls. compared to an estimated consumption within the zone of 96,000,000 bbls. Exports were over 2,000,000 bbls., approximately 90 per cent of which went to South Africa and Australia. Imports totaled approximately 52,000,000 bbls., 63 per cent of which came from the North American zone, largely from the United States, 9 per cent from South American zone and the balance from Persia and Dutch East Indies in the Oriental zone. Russia and Rumania refined about 70 per cent of the total output of the zone and the United Kingdom, France and Germany consumed approximately 65 per cent of the total. The leading refining and consuming nations are:

	Prod. (in bbls.)	Consumption (in bbls.)
Russia	19,740,000	5,400,000
Rumania	12,100,000	690,000
United Kingdom	5,300,000	28,200,000
Germany	3,300,000	14,000,000
Poland	1,202,000	607,000
France	730,000	19,165,000
Others	3,555,000	28,379,000
European zone	45,927,000	96,441,000

Within the European zone lie the important markets of northern and western Europe where competition is worldwide. In 1928 the United States contributed about 60 per cent of the total imports to this market but in 1931 this figure had fallen to 39 per cent. In 1928 Russia supplied 9 per cent and had increased its portion to 19 per cent in 1931. Rumania's share increased from 6 per cent to 17 per cent during this time.

Oriental Zone

The refineries in Dutch East Indies, Persia, British India and Japan are the most important in this zone. Their total output was over 29,000,000 bbls. while the consumption within the zone was about

(Continued on Page 34)

World Gasoline Production and Consumption in 1931

(Figures in thousands of barrels)

	Production	Imports	Exports	To storage	Consumption
United States	441,340	13,621	45,832	4,016	405,113
United Kingdom	5,300	26,252	2,171	1,181	28,200
France	730	18,575	140	.....	19,165
Canada	12,997	2,962	167	.....	15,792
Germany	3,300	11,417	170	547	14,000
Australia	659	5,436	.....	.....	6,095
Russia	19,740	.....	15,150	*810	5,400
Argentina	3,780	1,710	107	.....	5,383
Japan	2,269	2,975	119	.....	5,125
Italy	430	3,111	.....	.....	3,541
Spain	50	3,332	232	.....	3,150
Holland	125	3,272	297	100	3,000
Sweden	70	2,575	.....	.....	2,645
Czechoslovakia	920	1,598	210	.....	2,308
British India	1,866	354	.....	.....	2,220
Denmark	.....	2,218	102	.....	2,116
Belgium	75	2,100	279	*100	1,996
Union of South Africa	.....	1,884	.....	.....	1,884
Brazil	.....	1,820	.....	.....	1,820
New Zealand	.....	1,792	.....	.....	1,792
Mexico	4,214	471	1,877	1,248	1,560
Switzerland	.....	1,560	.....	.....	1,560
Dutch East Indies	12,993	27	10,929	586	1,505
Ireland	.....	1,300	130	.....	1,170
Venezuela	1,284	32	285	.....	1,031
Austria	287	746	20	.....	1,013
Philippine Islands	.....	876	.....	.....	876
Hawaii	.....	869	.....	.....	869
Norway	100	747	.....	.....	847
Cuba	210	636	.....	.....	846
Chile	20	810	.....	.....	830
Uruguay	.....	750	.....	.....	750
China	.....	715	.....	.....	715
Rumania	12,100	.....	12,843	*1,433	690
Morocco	.....	660	.....	.....	660
British Malay	.....	3,043	2,421	.....	622
Poland	1,202	.....	595	.....	607
Finland	.....	486	.....	.....	486
Egypt	840	523	893	.....	470
Hungary	430	25	.....	.....	455
Greece	.....	425	.....	.....	425
Portugal	.....	402	.....	.....	402
Africa Central	.....	400	.....	.....	400
Peru	2,600	.....	2,208	.....	392
Porto Rico	.....	380	.....	.....	380
Algiers	.....	360	.....	.....	360
Panama	.....	328	.....	.....	328
Tunisia	.....	325	.....	.....	325
Yugoslavia	280	34	.....	.....	314
Persia	10,572	.....	10,271	.....	301
Syria Palestine	.....	301	.....	.....	301
Colombia	280	.....	.....	.....	280
Turkey	.....	214	.....	.....	214
Siam	.....	211	.....	.....	211
Tripoli	.....	168	.....	.....	168
Dutch West Indies	16,552	640	17,038	.....	154
Trinidad	2,007	.....	1,857	.....	150
Jamaica	.....	150	.....	.....	150
Gold Coast	.....	126	.....	.....	126
Iraq	110	13	.....	.....	123
Spanish North Africa	.....	120	.....	.....	120
Indo China	.....	117	.....	.....	117
Latvia	18	98	.....	.....	116
Canary Islands	160	78	123	.....	115
Guianas	.....	110	.....	.....	110
Nicaragua	.....	104	.....	.....	104
Ecuador	136	.....	48	.....	88
Honduras	.....	81	.....	.....	81
Bulgaria	.....	78	.....	.....	78
Alaska	.....	72	.....	.....	72
Hong Kong	.....	245	173	.....	72
Korea	.....	72	.....	.....	72
Caribbean Islands	.....	60	.....	.....	60
Dominican Republic	.....	60	.....	.....	60
Lithuania	.....	54	.....	.....	54
Guatemala	.....	48	.....	.....	48
Gibraltar	.....	47	.....	.....	47
Bolivia	.....	42	.....	.....	42
Haiti	.....	41	.....	.....	41
Madagascar	.....	41	.....	.....	41
Salvador	.....	41	.....	.....	41
Estonia	.....	40	.....	.....	40
Costa Rica	.....	38	.....	.....	38
Arabia	.....	24	.....	.....	24
Bahamas	.....	18	.....	.....	18
Ceylon	.....	12	.....	.....	12
Tangiers	.....	12	.....	.....	12
Sarawak	1,350	.....	1,340	.....	10
Miscellaneous	.....	285	.....	.....	285
Total	561,396	127,795	127,795	5,567	555,829

*From storage.

California Operators Have Tried Many Types of Pumping Equipment in Various Pools

By L. P. STOCKMAN

LOS ANGELES, Calif., Oct. 29.—With the passing of flush production in most California fields and the pumping well now the rule rather than the exception, operators are once again giving attention to the mechanics of pumping. There is a very definite movement in California fields at present to reduce operation, maintenance and lifting costs in order to reach the degree of efficiency which is now so necessary because of the relatively low price of crude oil. Existing prices of California crude would be considered as quite favorable during periods of flush production but with the advent of the pumping era tht crude oil price schedule seems low, particularly with lifting costs running from 25 to 75 cents per barrel. There are still a number of flowing wells in California fields but, with the exception of Kettleman Hills, Ventura Avenue and Dominguez, pumping wells far outnumber those producing under a natural flow.

There is a very definite trend toward the use of small, economical prime movers in the pumping of wells in California fields. If we go back a few years we will find single cylinder gas engines in general use. These prime movers developed from 25 to 55 horsepower and were used for both pulling and pumping. These installations involved a lot of machinery and were not particularly efficient or economical to operate when compared with present practice. It requires approximately 15 horsepower to pump an ordinary well and about 30 horsepower to pull a well. It is quite obvious that the greater amount of energy, as represented by the difference between pumping and pulling operations, was not required and that with infrequent pulling jobs the horsepower rating over 15 was used only during a relatively short period of time and thus reduced efficiency of operation. The Union Oil Co. was one of the first to recognize the unnecessary use of engines with a horsepower rating in excess of 25 and steps were immediately taken to change future equipment. Engineers of the company accordingly assembled a portable pulling outfit mounted on a truck and thus enabled the field department to use smaller engines whose duty consisted solely in developing primary power for pumping operations.

Use of Electric Motors

Electric motors for pumping wells came into general use subsequent to the gas engine and the use of electric motors has since become quite popular. Here again, however, many wells have been overpowered and consequently show high lifting costs. Approximately 75 per cent of wells pumping in the Playa Del Rey Field use electric motors as prime movers. In the Santa Fe Springs Field one company is using electric motors of the large type on practically all of its pumping wells. The Union, by using its portable well pulling outfit, is able to use small electric motors with a horsepower rating only sufficiently high to economically perform primary pumping duty. The Union, incidentally, has installed an exceptionally interesting assembly on No. 14 Alexander, a pumping well in the Santa Fe Springs Field of Los Angeles Basin. This pumping unit, the first to be installed in California, is distributed by the Petroleum Equipment Co. It is powered by a 25-horsepower General Electric motor and is what might be termed a motorized reduction gear. It is a Jones & Corey assembly and incorporates a motorized gear assembly fabricated by the Pacific Gear & Tool Co. of San Francisco. This new motorized pumping unit of the Union was installed about five months ago and is holding up in good shape. The unit differs from most types in that the electric motor, or prime mover, rotates on a unit around the circumference of the driving gear with the result that the motor and its base act as a counterbalance. The motor and gear are connected by a link chain. The number of revolutions of the motor per minute can of course be regulated depending upon the number of strokes required by the particular well.

Automobile Engines Popular

The latest wrinkle in the movement to reduce lifting and production costs in California is the use of automobile engines as prime movers on pumping wells. These automobile engines operate on dry natural gas and show a fuel consumption ranging from 2,000 to 3,500 feet of dry natural gas per day. The first installation of this kind was started about six months ago but it has only been within the past few weeks that it has become of any great importance. L. R. Knowlton, an independent operator with one producing well in the Rosecrans Field, has the most modern hookup at the present time. This pumping unit, operating on natural gas, is an assembly of McCormick-Deering, a subsidiary of the International Harvester Co. of America. It consists of a four-cylinder, 35-horsepower tractor motor with a governor incorporated in the unit to equalize the load on the up and down stroke of the beam. It has a 10-gallon emergency gasoline tank to take care of any temporary failure in the supply of natural gas. When seen a few days ago it was delivering a load of 22 strokes per minute at approximately 600 r.p.m. and showed a fuel consumption for the previous day of 3,240 feet of natural gas. Knowlton's well was originally started by E. J. Miley but was acquired by the former several months ago and brought in pumping 260 bbls. per day during the latter part of June. During September production has averaged 130 bbls. per day, the oil being exceptionally clean and testing 39.2 A.P.I. The McCormick-Deering unit, which is hooked up with a standard gas engine as a stand-by unit, has a belt drive from an 8-inch pulley on the motor to a 56-inch pulley on a jack shaft, from which a further reduction is effected by a belt drive from a 30-inch pulley to a standard 10-foot bandwheel.

An Unusual Assembly

In addition to Knowlton's McCormick-Deering installation, there are two other unusual assemblies in the Rosecrans Field

Close-up view of motorized gear pumping unit

at present. One of these is on the Cypress Petroleum Co.'s well in the southern part of the field. This installation consists of a 200-horsepower Buda motor set in a specially constructed frame. It is set at right angles to the bandwheel and drives in the usual manner with a web belt, but shows considerable vibration after being in service for approximately one month. The other automobile engine used as a pumping unit in the Rosecrans Field is located on an old well of the Getty Oil Co. which has been turned over to Four Drillers. The prime mover in this case is a 1919 Buick standard six motor with a special Moon carburetor. The reduction ratio on this job is eight to one from the motor to the jack shaft and five to one from the jack shaft to the regular 10-foot bandwheel. This well is pumping 40 bbls. of 28.6 gravity oil cutting 20 per cent from a depth of 4,400 feet. Fuel consumption ranges from 2,000 to 2,250 feet of natural gas per day. Approximately one quart of vegetable oil per day is being used to lubricate the cylinder walls. This motor, like that in use on the Cypress Petroleum's well, has a tendency to heat and shows considerable vibration, but is still running along after one months' continuous operation. This high-speed motor is running at what would be the equivalent on an ordinary automobile speedometer of 32 miles per hour. A second Buick motor of 1924 vintage is held in reserve for use as soon as that now in use breaks down. The 1919 motor was purchased for $10 and the 1924 motor for $15.

Motorized gear pumping unit used by Union Oil Co. at Santa Fe Springs

Use at Playa Del Rey

There are several automobile motors in use at Playa Del Rey and it is safe to say that many more will be in use before long if the second-hand automobile market holds out. One well at Fifty-third Avenue and Speedway is using a 125-horsepower Wisconsin truck motor. A new installation was started a few days ago on the Toy Rebhausen Petroleum Co.'s well No. 2 at Avenue 51 and Trolleyway. The motor from a Cadillac automobile, mounted on a rigid steel frame, had just been moved into the rig when observed and is probably already in operation by this time. There are a number of automobile engine assemblies either already in operation or being set up in the Long Beach Field at present. The Two and One Oil Co. is using a Studebaker Big Six and a further inspection showed several Ford engines, two Star engines and a variety of others. At Huntington Beach, the Olympic Oil Co. is using an old Packard motor with good success. Up in the Santa Barbara Mesa Field, Charles Starke has installed a big six Nash engine as a prime mover for the pumping equipment. This installation is quite different from the practice followed by other operators. Starke reversed the transmission with the result that the axle turns backward when in high gear. A pulley has been welded on the axle and a belt drive connected to the flywheel and then through the regular method to the bandwheel. The speedometer reading is approximately 30 miles per hour and yields 30 strokes per minute. This operator starts the motor with gasoline and when warmed up cuts in natural gas and adjusts the butterfly to regulate the necessary amount of air to provide an explosive mixture. The natural gas used as fuel in this motor comes direct from the well via a pressure tank with the result that the gas is fairly wet and contains some casinghead gasoline. Fuel requirements approximate 2,300 feet of natural gas per day. This engine is assembled on a special platform built back of the engine house. In place of a governor, such as is found on the McCormick-Deering unit, counterweights are hung on the beam of this well to balance the weight of the rods and partially equalize the load.

In the opinion of competent production

The 1932 motorist will pay for value but he often balks at fancy prices

And he needs anti-knock gasoline

Dubbs cracked gasoline is anti-knock

You can make it at lowest cost

You don't have to charge a premium to make a profit but the premium quality is there

Dubbs cracking is the answer

Universal Oil Products Co
Chicago Illinois

Dubbs Cracking Process
Owner and Licensor

men, the work now being done by California operators in utilization of automobile engines will ultimately lead to improved equipment. One production man volunteered the statement that manufacturers of gas engines have a wonderful opportunity if they recognize the possibilities which they have before them. Because of lower fuel requirements and small operating costs, there is a ready market in California for small compact four-cylinder units. The automobile engines used in pumping California wells are, with one or two exceptions, set at a right angle with the bandwheel and therefore drive direct by the use of a belt. Average daily consumption of natural gas approximates 2,500 feet. The gas in most cases is taken direct from a natural gas line and, on the basis of 10 cents per 1,000 feet, fuel requirements cost about 25 cents per day. The upkeep on a small compact pumping unit is substantially lower than other prime movers. The Union Oil Co. has been conducting a series of experiments with Waukesha motors in order to determine future possibilities along this line. The company has one job which consists of a four-cylinder gas engine which cost approximately $400 installed. Comparative figures on operation costs indicate a substantial saving as specially designed motors cost approximately $1.50 per day to operate, as compared with approximately 20 cents per day with the gas engine in question. Engineers of the Union are of the opinion that automobile engines are not particularly adaptable to this type of work but that there is a large field for a carefully engineered motor. The gasoline engine of the Union develops 25-horsepower at 1,800 r.p.m. and has a relatively flat torque curve and can slow down to 800 r.p.m. and deliver 40 per cent of the horsepower rating. The high torque of ordinary automobile engines is expected to prove somewhat of a handicap. The Union's recently designed gas engine, which has been in operation for two or three months, is of the heavy duty type and capable of pumping from depths to as great as 7,000 to 8,000 feet. All of the automobile engines in use in California fields are operating in high gear at a constant rate of speed. While commenting on the use of automobile engines fueled with natural gas, it might not be amiss to say that automobile engines using gasoline have been used in mines for several years running air compressors and other light work.

Explain Audiometer Limitations in Determining Antiknock Performance of Motor Fuel

By D. P. BARNARD*

It is generally recognized that, whatever be its exact mechanism, the phenomenon of detonation in the induction type of internal combustion engine is accompanied by an extremely rapid rate of energy liberation toward the end of the combustion reaction. This violent activity is apparent in a greatly increased heat loss to the combustion chamber surfaces and by mechanical shock, the most prominent evidence of which is the noise or "ping" resulting from the suddent distortion of the walls of the combustion chamber. While the avintion engine is quite sensitive to this excess heat liberation, the automobile engine, and particularly the occupants of the car, find the shock and noise the more annoying. As the objectionable sound of detonation, therefore, forms the criterion by which the consumer judges the knocking characteristics of a gasoline it is obvious that all development work on this subject, where passenger automobiles are involved, should be based largely upon sound, or noise, manifestations. While ultimately the criterion must be the human ear, its well-known variable sensitivity and fatigue characteristics have led several research laboratories to attempt to use accoustimeters, in one form or other, in detonation research work.

Several types of accoustimeters, or audiometers, have been employed, differing mainly in detail rather than in principle of operation. The one used for certain work in the Whiting Research Laboratories of the Standard Oil Co. (Indiana) is probably quite representative and is shown in diagrammatic form in the accompanying Figure 1. To the best of the writer's information this general "hookup" was first used in this type of work by the Atlantic Refining Co.[1] The modifications have been worked out subsequently and serve, in general, to increase the reliability of the instrument. The filter element indicated passes all frequencies above 2,000 to 2,500 cycles per second (in which range the bulk of the noise of detonation occurs) and quite effectively prevents from appearing in the output virtually all mechanical engine noises except those due to valve tappets. In the laboratory it has been the custom to place the microphone in a "sound shadow," located by the searching process, in order to avoid this particular interference. The straight induction type of pick-up has many advantages over the microphone in this work, although it may possibly be subject to the criticism of being affected by engine vibrations not ordinarily audible. As an example of the results which have been obtained with the above-mentioned instrument, Figure 2 shows the type of relation obtained between C.F.R. laboratory knock rating and the detonation noises occurring in one particular engine operated on the dynamometer stand as indicated. It will be noted that as the knock rating of the fuel increases the noise of detonation decreases in intensity to the point (at about 78 octane number) where detonation is eliminated. In this case the audiometer filter was quite successful in shutting out extraneous mechanical noises. It should be pointed out at this time that neither the shape of the curve, nor the fact that 78 octane number sufficed to silence the engine have any general significance, as the engine was not a stock model and a slight change in compression ratio materially alters its behavior. Figure 3 shows a similar curve taken in an automobile during a constant speed test on a 3 per cent grade. The particular arrangement used, in which the microphone was installed under the engine hood of the car, was found reasonably successful.

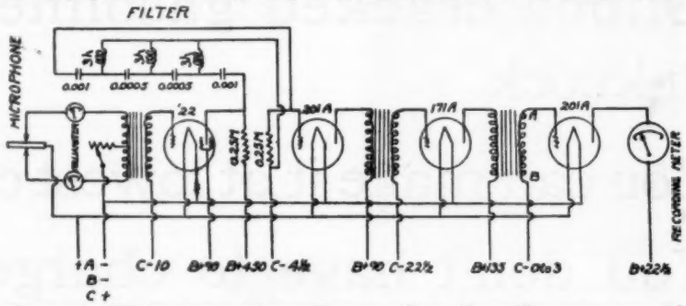


Figure 1—Wiring diagram for audiometer. Note: Recording meter to read 0.1 milliampere by adjusting C bias with A and B short circuited

Limitations

The audiometer as applied to detonation can, like any good instrument or tool, be either a valuable aid or it can be quite misleading, depending on application and interpretation of results. The greatest criticism of the "electrical ear" is that it possesses no brain. The human brain regards certain sounds, especially if of a steady, low, intensity as quite soothing and pleasant. At best the electric ear can judge only on a frequency basis, and a not too definite one at that, and is entirely incapable of distinguishing "pleasant" from "unpleasant" sounds of the same or different frequencies. For example, there is reason to believe that not all of the sounds registered in Figures 2 and 3 would be considered objectionable by the automobile occupant. In fact it is this particular uncertainty which has been quite instrumental in determining the C.F.R. Road Correlation Committee to employ actual human judgment rather than any mechanical or electrical devices in its work of correlating the C.F.R. detonation procedure with road performance. Furthermore, the sensitivity of the normal human ear varies quite markedly with frequency and the task of building an audiometer with a frequency sensitivity curve paralleling the human ear seems, at the present time at least, rather hopeless. In the study of some particular sound frequency which may be emitted from a piece of machinery, however, the audiometer may frequently be a useful and valuable tool of which, in addition to the one described, there are several very effective proprietary instruments available. General experience indicates, however, that for internal combustion engine work in particular, the audiometer should be provided with a series of high, and preferably several band pass filters if it is to give values capable of reliable interpretation. It has been the experience of the writer's laboratory that without suitable filters the audiometer may be quite unreliable, particularly for detonation work.

*Assistant director of research, Standard Oil Co. (Indiana).

[1]Effect of Sound Intensity on Knock Ratings; Huf, Sabina and Hill. S.A.E. Trans., Vol. 26, p. 464.

FLOW TEST POSTPONED

LOS ANGELES, Calif., Nov. 1.—Due to lack of adequate finances to carry out such a big job Umpire Pemberton has indefinitely postponed the flow test scheduled to be started in Long Beach Field today. This decision came somewhat as a surprise as it voids a previous announcement the flow test would be made. Long Beach operators have been objecting to the test since originally ordered.

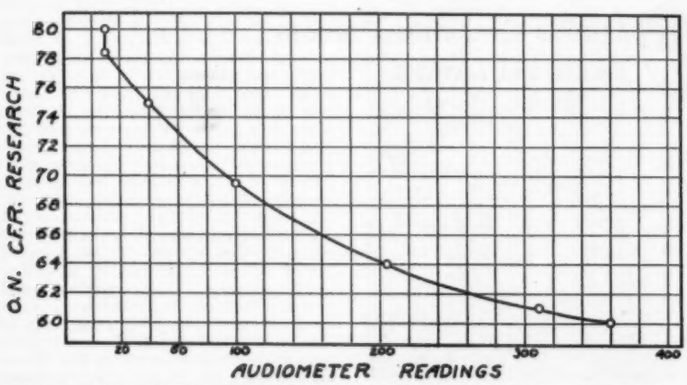


Figure 2—Six-cylinder passenger car engine with high compression head—115-pound C.P. engine operating at 1,000 r.p.m.; test made on dynamometer.

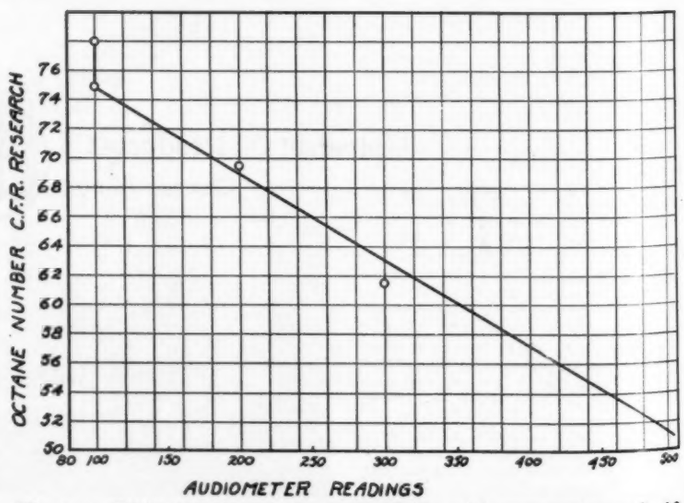
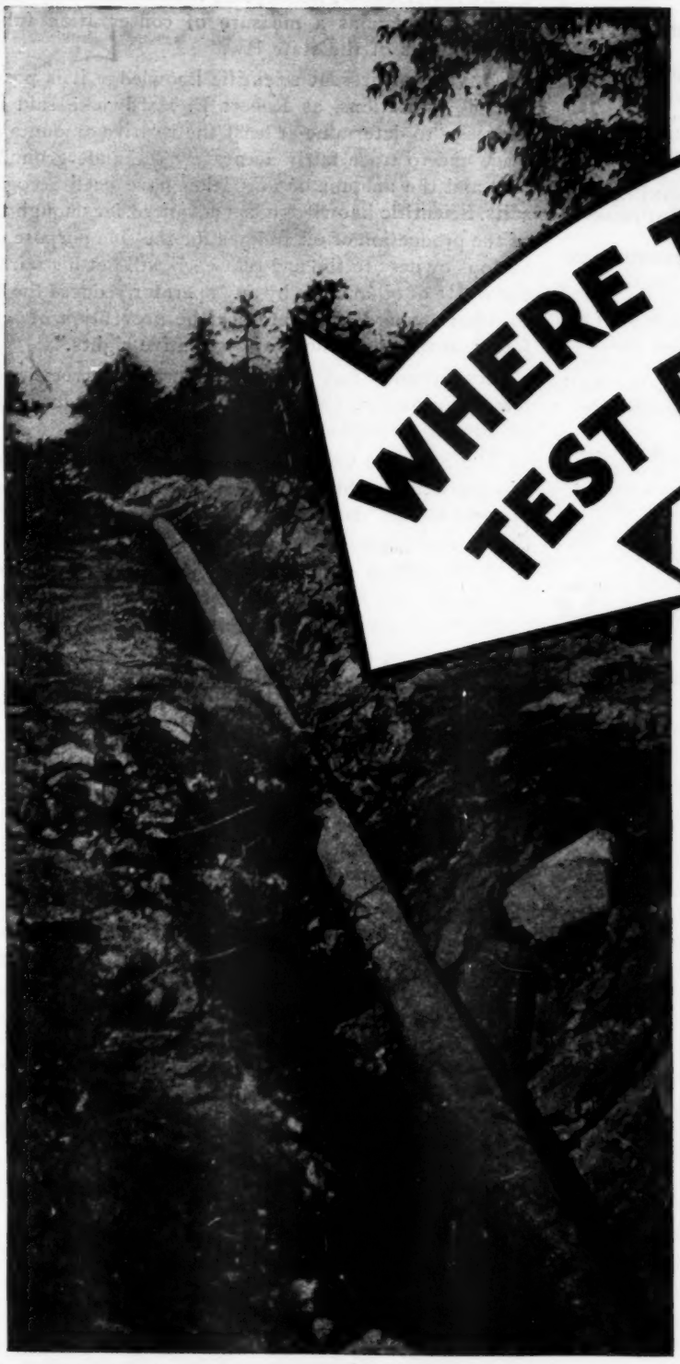


Figure 3—Eight-cylinder passenger car engine with compression ratio 4.9 to 1. Engine operating at 800 r.p.m. on 3 per cent grade..



WHERE THE REAL TEST BEGINS!

Seamless Pipe Means Maximum Security Because There Is No Weld

Laboratory and mill tests are devised for the detection and rejection of that portion of a product which does not possess all the qualities required. However ingeniously planned and conscientiously carried out, such tests cannot anticipate every strain and stress in service. For a product like pipe, the real test —the final answer is behaviour "on the job". Line pipe is subjected to stresses of unknown intensities—vibrations, shocks and overloads —requiring the quality of steel and uniformity of wall-strength possessed in unsurpassed degree by NATIONAL Seamless.

There is no weld—no longitudinal line of weakness. Uniformity of strength completely around the circumference and throughout the length is its unique characteristic— one continuous piece of steel pierced from the solid, expanded and rolled at temperatures which produce grain refinement and uniform transverse and longitudinal strength and ductility.

NATIONAL Seamless Pipe demonstrates its superior qualities under the crucial test "on the job". Countless installations and many years of satisfactory service prove it the ideal material for oil, gas and gasoline lines.

NATIONAL TUBE COMPANY

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PIERCED FROM SOLID BILLETS - NO WELDS

The Oil and Gas Journal

PRODUCING REFINING PIPELINE ENGINEERING MARKETING

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Scientific Regulation

The difficulty in Texas is not over regulation but the manner of regulation.

The court speaks of "the permissible purpose of preventing physical waste" and "the forbidden one of limiting production to demand".

The allowable for East Texas is described as "arbitrarily apportioned on a per well basis in disregard of differences in capacity and in field location of the wells and of the grossly inequitable result of such apportionment, and as not intended to be conservation orders to prevent physical waste but economic orders to keep the supply within demand."

It is declared that the commission with "an eye on keeping supply within demand has arbitrarily and without adequate grounds limited production far below any amount which the evidence permits and through its per well requirement so arbitrarily, unjustly and in a confiscatory way distributed it as that it will inevitably take the oil of plaintiffs, situated as they are most favorably on the structure, to give it to others not so favorably situated."

The court then says that the commission "has never made experiments, tests or inquiries to ascertain the greatest amount of oil which each producer may take from his wells without injury to the field and that it has never encouraged nor indeed permitted such inquiry or test as in carrying out the legislative policy of supervising production to prevent physical waste it ought to have done."

Addressing the petroleum engineers at Ponca City recently, W. S. Farish said:

"To calculate allowable withdrawals in proportion to total potential, as in Oklahoma City, or on a flat well basis, as in East Texas, defeats our efforts to produce oil efficiently. These distorted and unfair allowable figures cause physical waste, violate the correlative rights of property owners and are intolerable. I believe the engineers can devise a rational formula for the determination of allowables from various properties in any pool where outlet must be prorated."

It was suggested in The Oil and Gas Journal last July that bottom-hole pressures constitute the most accurate and dependable record of what is taking place in the producing horizon and that this record should be the basis for calculating allowable production.

The commission, it was said, could not do better than to appoint an engineering committee to secure bottom-hole pressure readings for use in a thorough study of the field with a view to the adoption of the plan proposed.

Such a survey "would give the commission a definite guide for future revisions and would place the curtailment policy on an unassailable foundation as a measure of conservation fulfilling the exact requirements of the state law."

In view of present scientific knowledge it is possible within reasonable limitations, as Robert E. Hardwicke said in his A. I. M. E. address, "to determine at least the relative amounts of oil and gas in place and to trace fairly accurately the underground migration. The fact and the amount of migration have been recognized in damage suits. Scientific knowledge has advanced far enough to justify control of the production of oil and gas for the sole purpose of protecting the various owners to the end that each will get his fair share. Obviously the waste of oil and gas by any operator reduces the amount available to other owners and therefore the prevention of waste is a proper factor in the adjustment of correlative rights."

Conservation and the maintenance of correlative rights are absolutely consistent. Correlative rights in fact cannot be maintained without conservation.

The Supreme Court of the United States has upheld the doctrine of correlative rights in the Champlin case. This doctrine is directly opposed to the "devil take the hindmost" practice which seeks to get the oil first regardless of the rights or interest of anyone else.

It recognizes the paramount importance of the reservoir energy upon which the fullest possible recovery depends and the correlative right of each owner to the use of that energy.

There is no clash between conservation and the owner's right to the recoverable oil and gas beneath his land. It is when the landowner seeks not alone the oil and gas under his own land but that which may be drawn from beneath some other owner's land that inequity arises.

The ideal system would be that under which the landowner "would secure that proportion of the original recoverable contents of the pool (or the value thereof) which he would be able to produce from his particular tract under a program of uniform and efficient producing practice for the pool as a unit."

The original underground conditions in East Texas have been disturbed by almost two years of drilling and production, but bottom-hole pressure readings afford a reasonably accurate gauge of existing conditions.

With such readings, penetration of sand, location and the time element as factors, engineering science should be able to calculate an allowable production that would insure approximation to the most efficient recovery and allocate it fairly between all wells.

Even then, of course, there would be discontent because there are always some who think their share should be larger but it would be an improvement over less scientific methods.

The conservation principle is firmly established both in law and in opinion within the industry. Putting it into effect has been handicapped by differences in viewpoints in the industry and by conflicting policies in the various states.

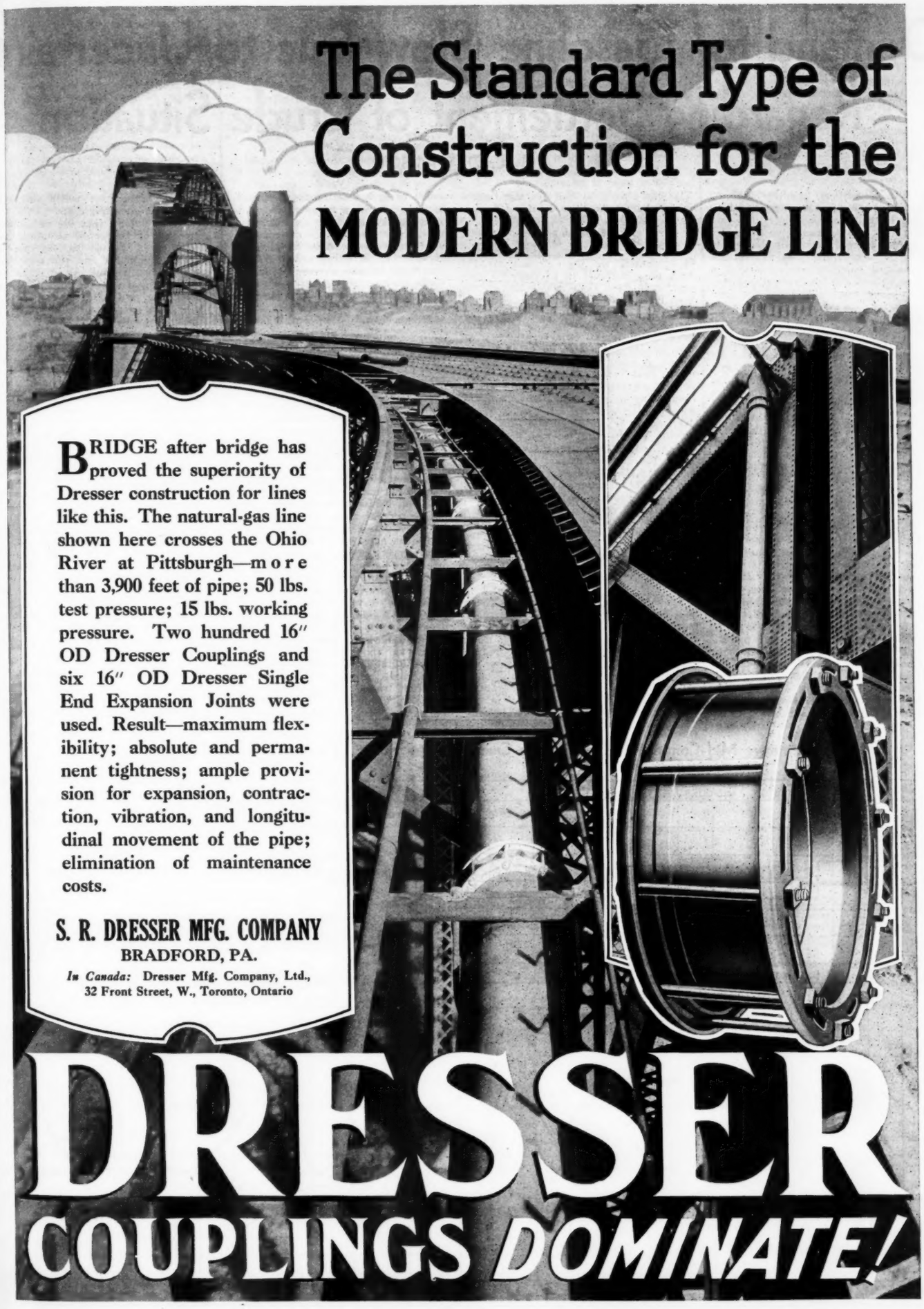
Many of the steps taken were forced by circumstances rather than design. If the industry could have deliberately planned a conservation program that could have been adopted generally it would doubtless have been very different from what has actually been done.

Nevertheless the net result has been progress. We have got away from the piratical idea of oil production. We have established the sanctity of correlative rights. We think of the pool rather than a gusher, of ultimate recovery rather than a sudden peak.

The immediate question is whether we have gone far enough yet to take advantage of the scientific knowledge of oil production we now possess to apply it in the working out of a conservation plan that will be really effective.

The Texas Railroad Commission has an opportunity to demonstrate its ability to use the power which the legislature and the courts have accorded to it by preparing and issuing such an order based, not on hit or miss compromise, but upon sound engineering principles.

The Standard Type of Construction for the MODERN BRIDGE LINE



BRIDGE after bridge has proved the superiority of Dresser construction for lines like this. The natural-gas line shown here crosses the Ohio River at Pittsburgh—more than 3,900 feet of pipe; 50 lbs. test pressure; 15 lbs. working pressure. Two hundred 16″ OD Dresser Couplings and six 16″ OD Dresser Single End Expansion Joints were used. Result—maximum flexibility; absolute and permanent tightness; ample provision for expansion, contraction, vibration, and longitudinal movement of the pipe; elimination of maintenance costs.

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DRESSER COUPLINGS *DOMINATE!*

Demand for Gasoline Slow Due to Uncertainty Regarding Settlement of Crude Situation

By C. O. WILLSON

Buying of refinery gasolines both on contracts and the spot market slowed up in the Oklahoma market the latter part of last week and prices on the U. S. Motor grades were fractionally lower the first of the new month. Most refiners had not changed their prices established a week or 10 days ago but two or three companies which are most active in open market sales, lowered their prices to meet competition coming largely from a group of Texas refiners supplied with East Texas crude oil.

In contrast to gasoline, the market on kerosene was exceptionally strong and this strength reflected higher quotations for some grades of furnace oil which are also scarce in the Oklahoma market. All grades of fuel oils and gas oils continue tight, indicated in the fact that the 28-30 grade of fuel oil has advanced to $1 per barrel with sales reported at that figure during the week. Other products were generally unchanged.

So far as refinery gasolines were concerned developments of the past week duplicated conditions of previous periods this year. The refinery tank car market in Oklahoma and other Mid-Continent and Middle West refining areas had been showing consistent price strength since early in October due entirely to the supposed removal of the threat of lower posted schedules for crude oil which confronted the industry throughout August and September and which resulted in a gradual decline in gasoline tank car prices. The upward trend in prices stopped suddenly last week when a Federal court decision was announced which in effect held that the proration plan of operating the East Texas Field under orders of the Texas Railroad Commission was illegal. The court decision and its significance are explained elsewhere in this issue.

Await Developments

So far as the refinery gasoline market is concerned, the decision has brought back the old threat of uncontrolled production in East Texas which has always been interpreted to assure a general lowering of posted crude oil schedules, an increase in crude oil runs to stills and lower prices for all refinery products. At this writing there was no definite indication of what the next shift would be in the East Texas situation. The attitude of most refiners was to mark time until "something more happens." If some method of coping with the latest East Texas development is discovered and production continues to be curtailed with a carrying out of curtailment programs in other areas, the gasoline market in Oklahoma and other Mid-Continent areas will firm and the cheap material of the past few days will cease to be a market factor. Should the Federal court decision nullify the efforts to control production in Texas, then lower rather than firm prices are in prospect. The foregoing summarizes predictions as obtained from representative buyers and sellers the first of the week.

Among certain market observers there is a feeling that the entire industry is moving into a "showdown" period in which the future policies as regards markets will be determined for the winter months. As is generally known there is no unanimity of opinion as to proper policy to pursue in regard to advances or reductions in posted crude oil schedules. The Federal court decision is conceded to have indefinitely postponed the meeting of recent advances in crude oil schedules by those who are still adhering to the old schedules. Furthermore, it is predicted in trade circles usually well informed that the advances will not be met regardless of the success or failure of crude oil proration programs until such time as conditions in retail markets are corrected.

It is said that sponsors of higher crude oil prices will not only have to improve the refinery tank car markets for gasoline but this improvement must be reflected in retail markets so that the higher prices for raw material can be justified on a basis of revenue to the companies that have to look to the final markets in order to offset higher operating costs. In recent months due to an improved statistical situation, tank car markets at Mid-Continent refineries have responded quickly to advances in crude oil prices. Weakness has followed these advances in some cases due to the fact that bootleg crude oil became a factor in the market but in general it can be said that tank car markets in the Middle West and Mid-Continent have been stronger than they were a year ago when it required a large amount of interrefinery support to bring about any improvement in prices.

Now, however, certain interests are credited with taking the firm position that these higher tank car prices must be passed along to retail markets so there is an equitable relationship between the prices paid for crude oil and the revenue of the filling station. Although gasoline is the only product mentioned in conversations those taking this view of the oil situation also mean fuel oil, kerosene, lubricating oils and other products the revenue return for which also is out of line with operating costs.

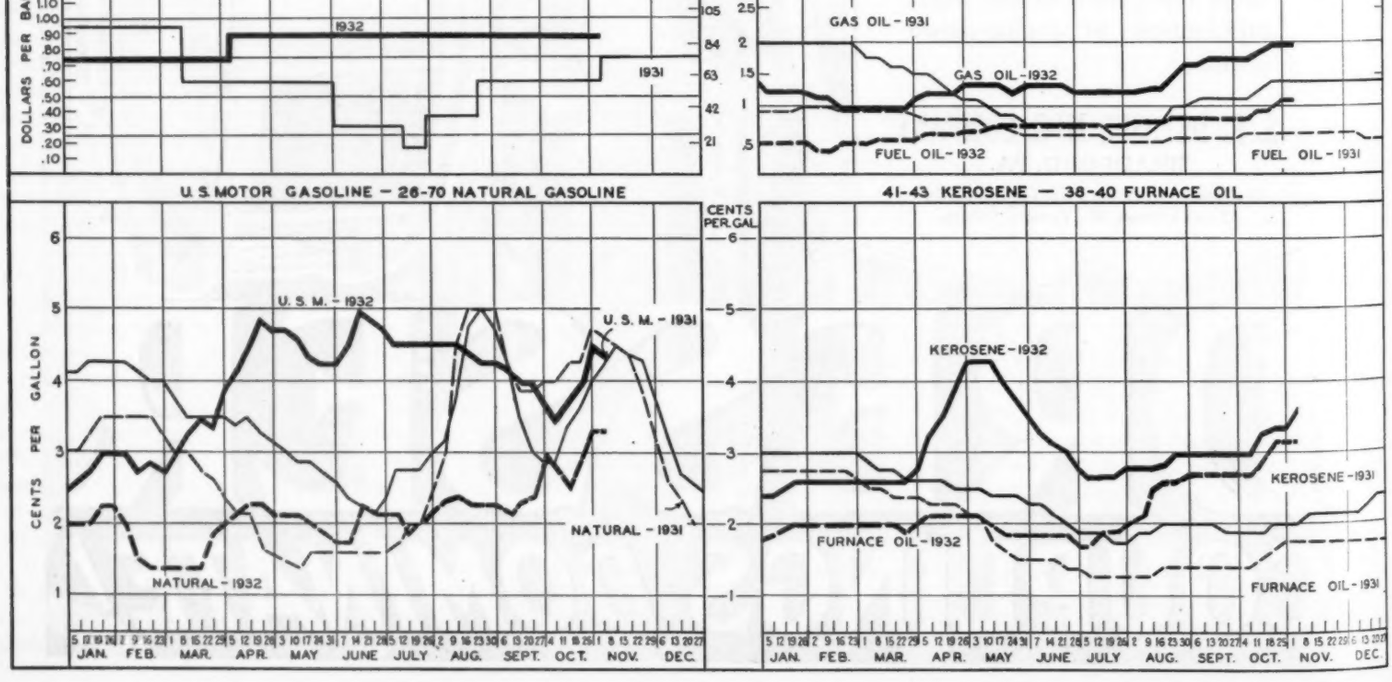
It is claimed that the basis for a correction of the retail situation is a reduction in spreads between the delivered tank car prices and the retail markets over a long enough period that there will be an incentive to advance the latter and maintain profitable retail markets. Over the past year, it is pointed out, it has been impossible to make advances in consumer prices for motor fuels and "make it stick" over any length of time. Invariably, one or more distributors in a particular section have found it expedient not to meet the advances or after meeting them for a few days to return to former price levels with the hope of attracting business from concerns attempting to maintain the higher prices. The net result of this development has been the most unsatisfactory year in the recent history of the industry so far as marketing operations are concerned.

Fundamentally, according to one economist who has watched developments closely over the past year, the differences of opinion now apparent in regard to the best policy to follow in correcting conditions go back to the crude oil situation. One side believes that the remedy lies in higher prices for crude oil and the other lower. Each side has the support of large and small refinery operators so that the disagreements are not based on size. It is predicted in trade circles that November will determine which view is to prevail.

Gasoline and Naphtha

As soon as the Federal court decision previously referred to became known last week cheap gasoline, usually of the low

Representative Mid-Continent Quotations on Crude Oil and Refined Products Basis Oklahoma (Group 3)



octane U. S. Motor grade, made its appearance on the spot market in Oklahoma. Most of it was Texas material in the hands of brokers who were long on the market with gasoline bought under 4 cents earlier in the month. Influenced by a desire to get out from under this material before the end of October, sellers offered this low octane U. S. Motor as low as 4 cents basis Group 3. None of this lowest priced material so far as known came from Oklahoma refineries, but sellers in that State who had material to offer were forced to shade their quotations. In sales to the trade the first of the week the low octane U. S. Motor gasoline was bringing a low of 4⅜ cents, with many refiners continuing to quote as high as 4¾ cents. The middle octane gasoline was selling at three-eighths cents over the low octane with a fair demand reported by several refiners.

No price changes were made in the grades above U. S. Motor in gravity. These grades are not produced in sufficient quantity so that they are constantly forced on the market and sellers generally are continuing to maintain their quotations. Certain refiners and blenders are offering a high gravity product which, while not uniform in specifications, is sold in competition with the regular high gravity grades. This is being sold as a winter motor fuel for northern jobbers. The gasoline has a gravity usually above 62 and as high as 68 with a low initial and 10 per cent for volatility. The endpoint generally is under 420 and as low as 375. In regard to octane, a rating in the middle grade is generally guaranteed with cases reported in which a minimum of 65 is guaranteed. This product is being sold over a price range of 4¾ to 5¼ cents.

Blending naphthas are practically unobtainable for spot shipment in Oklahoma and the nominal prices quoted are the same as last week.

Kerosene

A water white grade of 41-43 water white kerosene meeting the usual specifications in regard to color, endpoint and sulphur was bringing a low of 3⅝ cents the first of the week. Several refiners have advanced their quotations to 3¾ cents and reported the regular volume of business the first of the week. Similar advances were made in the higher gravity kerosenes. The lowered output of kerosene with an improvement in demand in some sections, including a better export movement, accounts for the strength in kerosene. So long as crude runs to stills are maintained at their present low point, it is predicted that kerosene will continue to be scarce.

Refined Market Barometer

Kerosene and furnace oils were the strongest products in refinery tank car markets over the past week. In several refining groups there is a scarcity of kerosene, and sellers in a position to make immediate shipments have been able to secure slightly higher quotations. Furnace oils also are generally more active due to the approach of the season of maximum consumption, and with limited supplies the market is firm. Refinery gasolines did not develop a general price trend over the week. Uncertainty regarding the crude oil situation was a factor in the weakness reported from several refining areas. Natural gasolines continued firm both in California and Mid-Continent. Heavy fuels are generally steady or higher at interior points with dullness reported in coastal markets. Cylinder stocks weakened along the East Coast with no price changes in other areas. Wax inactive and prices lower in East. Following advance in European markets, gasoline quotations at Gulf Coast for export movement advanced.

Mid-Continent—Refinery gasolines reflect unsettled conditions in crude oil markets and prices lowered fractionally by several refiners. Kerosene strong and prices higher when any changes made. Good demand for furnace oils and quotations on some grades higher. Heavy fuels of low cold test firm. Excess supplies of high cold test fuels in Texas and North Louisiana. Natural gasolines firm. Slow demand for lubricants and wax.

East Coast—Steady undertone to gasoline market with seasonal decline in demand. Export gasoline quotations advanced and prices in line with recent advances in Rumanian market. Heavy movement of kerosene. Cylinder stocks weak and prices lower on several grades. Bunker fuel oils and Diesel oils steady. Prices lower on paraffin wax. Heavy seasonal demand for furnace oils.

Chicago—Residual fuel oil and furnace oils markets strong and prices higher on several grades. Gasoline market unsettled with some resale material available under offerings of refiners. Coke prices advanced. Kerosene steady with limited supplies. Some grades of special naphthas advanced.

Gulf Coast—High gravity fuels strong and prices strong. Bunker fuels and Diesel oils unchanged. Gasoline weak. Kerosene strong and prices stronger for immediate shipment. No change in neutrals.

Pennsylvania—Prices generally unchanged. Gasoline slow with good movement of kerosene. Bright stock and neutral oil slow.

California—Gasoline market unsettled although prices on high octane material advanced in domestic market. Natural gasoline prices higher. Heavy fuels unchanged.

Fuels

The few sellers of high gravity fuels report a steady demand. Two or three refiners in Oklahoma who make a 28-30 zero grade advanced their quotations to $1 per barrel and buying continued. Sales of 24-26, of low to medium cold test over a price range of 60 to 70 cents were reported. A high cold test product of this gravity from Oklahoma City continues to be quoted at 45 cents. Low gravity industrial fuels of low viscosity are selling in Oklahoma at a low of 45 cents. Prices range down to 37½ cents for heavy residuum stocks which require special burning equipment for use as fuel.

Natural Gasolines

The start of the new month found new buying less active. Prices on the 26-70 grade, however, were being maintained and the low vapor pressure grades were scarce and quoted higher than a week ago. The 26-70 grade was quoted in Oklahoma at 3¼ cents and 3⅛ to 3¼ cents in Texas. The going market on 18-55 was 4 cents, 15 pounds 4⅜ to 4½ cents and 11 pounds at 4¾ cents.

One company was reported to have purchased approximately 1,500,000 gallons of 18-55 for shipment to the Gulf Coast where it will be moved by boat to the East Coast to blend with naphtha. This purchase is believed to have materially strengthened the statistical situation in the Mid-Continent for the first half of November although the business is reported to have been placed with only two companies.

Furnace Oils

Some prime white distillate closely approximating kerosene in specifications is being offered out of East Texas refineries at a low of 3¼ cents basis Oklahoma. Except for this material the product is scarce. There are inquiries in the market for all grades, the 32-36 zero, light or dark color being particularly scarce. Several sellers advanced their quotations on all grades one-eighth cent during the week.

Lubricants

General prices on lubricants from the low viscosity neutral oils to the heavy bright stocks are unchanged. The demand is largely for the low cold test grades of all neutrals and cylinder stocks and the high cold test grades are a drug on the market. Little trading was reported in wax during the week with no changes in quotations.

BRAZILIAN RAILWAY DIESELS

NEW YORK, Oct. 29.—The Buenos Aires-Great Southern Railway in Brazil will shortly place in operation four large Diesel-electric power units, now nearing completion at the British works of Sir W. G. Armstrong, Whitworth & Co.

One unit is an electric locomotive, with an overall length of 72 feet, while the other three are mobile power plants to be used in supplying electricity to long-disstance passenger trains.

Each unit has a fuel capacity of 2¾ tons of oil, and will be capable of attaining a maximum speed of 70 miles per hour.

POLISH OIL TANKER LOST

NEW YORK, Oct. 31.—The Polish oil tanker "Niemen," of 5,000 tons registry, was lost in the Baltic Sea recently when it sank almost immediately following a collision with the Swedish steamer "Lawhill." The officers and crew of the tanker were saved.

The "Niemen," owned by the Polish government shipping company, was a modern tanker, built on the Tyne in 1927. She was carrying a cargo of refined products from Gdynia to Sweden at the time of the crash.

ADOPTS FIVE-DAY PLAN

DALLAS, Tex., Nov. 1.—The Magnolia Petroleum Co. has adopted the five-day plan throughout its organization and is putting it into effect as rapidly as possible.

American Petroleum Institute Weekly Refinery Statistics

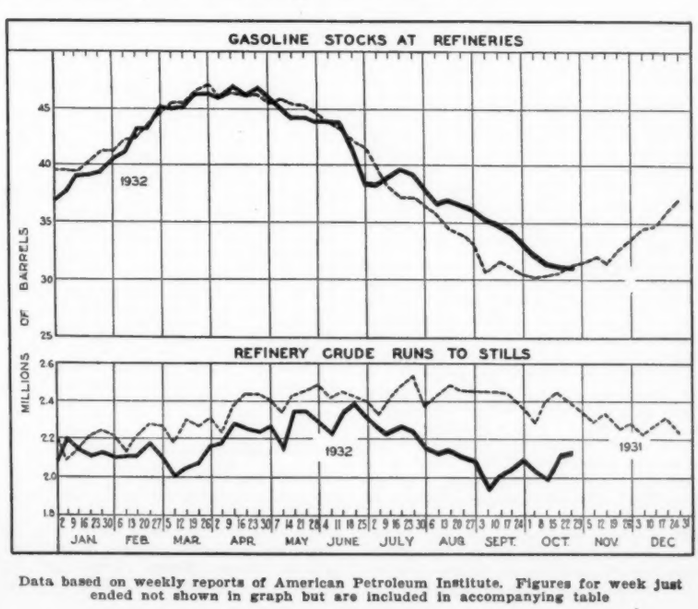
Figures below reported for week by American Petroleum Institute. (1) Per cent refinery capacity represented. (2) Daily average crude runs to stills. (3) Gasoline stocks. (4) Gas oil and fuel oil stocks. All figures in 42-gallon barrels.

Week Ending October 29, 1932, Compared to Week Ago

	Week ending October 29				Week ending October 22			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
East Coast	99.1	413,000	3,893,000	8,735,000	99.1	423,000	4,012,000	9,146,000
Appalachian	95.0	86,000	854,000	729,000	95.0	100,000	927,000	769,000
Ind., Ill., Ky.	97 5	293,000	2,956,000	4,093,000	97.5	303,000	2,984,000	4,116,000
Okla., Kans., Mo.	88.4	202,000	2,951,000	2,996,000	88.4	226,000	2,901,000	3,000,000
Tex. Gulf	98.2	375,000	4,940,000	9,868,000	98.2	389,000	4,902,000	9,760,000
La. Gulf	97.3	67,000	1,262,000	3,814,000	97.3	75,000	1,246,000	3,931,000
Inland Texas	72.1	83,000	1,047,000	2,102,000	72.1	99,000	1,065,000	2,081,000
N. La. and Ark.	94 6	42,000	104,000	530,000	94.6	45,000	97,000	526,000
Rocky Mtn.	91 4	31,000	1,150,000	457,000	91.4	33,000	1,168,000	459,000
California	94.6	448,000	12,219,000	100,580,000	94.6	452,000	11,990,000	100,967,000
Total U. S.	93.6	2,040,000	31,376,000	133,904,000	93.6	2,145,000	31,292,000	134,755,000

Week Ending October 29, 1932, Compared to Year Ago

	Week ending October 29				Week ending October 31, 1931			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
East Coast	99.1	413,000	3,893,000	8,735,000	100.0	476,700	3,931,000	10,223,000
Appalachian	95.0	86,000	854,000	729,000	91.8	100,300	1,343,000	1,654,000
Ind., Ill., Ky.	97 5	293,000	2,956,000	4,093,000	98.9	319,300	3,208,000	5,519,000
Okla., Kans., Mo.	88.4	202,000	2,951,000	2,996,000	89.6	249,600	2,843,000	5,095,000
Tex. Gulf	98.2	375,000	4,940,000	9,868,000	99 8	441,000	4,380,000	8,362,000
La. Gulf	97.3	67,000	1,262,000	3,814,000	100.0	92,400	665,000	2,938,000
Inland Texas	72.1	83,000	1,047,000	2,102,000	....	122,300	1,296,000	3,326,000
N. La. and Ark.	94 6	42,000	104,000	530,000	....	47,700	114,000	869,000
Rocky Mtn.	91 4	31,000	1,150,000	457,000	89.4	33,700	1,251,000	826,000
California	94.6	448,000	12,219,000	100,580,000	97 1	452,400	12,414,000	96,895,000
Total U. S.	93.6	2,040,000	31,376,000	133,904,000	95.2	2,235,400	31,445,000	135,707,000



Data based on weekly reports of American Petroleum Institute. Figures for week just ended not shown in graph but are included in accompanying table

Heating Oil Markets Get Play in Chicago Area; Gasoline Spot Market Remains Unchanged

By ROBERT C. CONINE
Chicago Bureau, The Oil and Gas Journal

CHICAGO, Oct. 31.—The residual and distillate heating oil markets in Chicago district are taking all of the play and the motor fuel business in comparison appears practically at a standstill. Certain small refiners and marketers of gasoline have taken an exceedingly bearish position which they are able to hold because of a pronounced lull in jobber buying at this time of the month. Although the air is filled with quotations of U. S. Motor gasoline at 4¼ cents to the trade, the actual gasoline involved appears to be insignificant in quantity and all of this material which it was possible to check originates from two sources, one in the Tulsa district, and one in the Fort Worth district. Jobbers are reluctant to buy at any price, and when they hear quotations which move down gradually during the day to 4¼ cents to the trade, they are prone to believe that the customary relapse has set in. The marketers who are holding to their recently advanced price schedules say that the underpriced material has been placed on the markets in an effort to nullify the effects of having been caught short. One major refiner said Monday that the larger refiners will buy up all of the low-priced material offered on the markets this week.

Heating Oils Advance Sharply

Scarcity of suitable heating oils and a heavy demand for them has had the effect of boosting the tank car and tank wagon spot markets to levels which were hardly anticipated by the makers of numerous fuel contracts now in force. The decision of most of the Chicago district heating oil distributors to peg the contract price at 1½ cents above the spot price instead of a cent, was well advised, but the tank car markets are such that maximum contract prices are in effect and the open market prices are practically out of reach except on the basis of the new tank wagon heating oil prices which go into effect today for Empire Oil & Refining Co., Deep Rock Oil Corp., Pure Oil Co. and the members of the Chicago Oil Heat Institute. Today's advances affect contract prices. New tops for contracts have not been announced. Standard Oil Co. of Indiana, Sinclair Refining Co. and Shell Petroleum Corp. have not indicated whether they will meet these advances, although at least two of these companies feel that higher tank wagon prices are justified by marketing conditions in Chicago district.

The mechanics of certain price cutting known to exist in the district in the heating oil tank wagon markets is revealed by a major refiner as follows: "Several individuals who might otherwise belong to the ranks of the unemployed have managed to get possession of an old tank truck and are doing business on a cost plus basis. Their investment is negligible and they can peddle oil from their truck even if they have to bargain with the consumers. If they clear $2 a day they are satisfied. This situation threatened the tank wagon markets in Dallas, Tex., some years back until the fire marshal condemned the old trucks and ramshackle bulk plants. Outside of this type of operation in Chicago district the tank wagon markets appear to be in a healthy condition, and there is no reason why we should not advance our postings."

Tank Car Advances Monday

Shell Petroleum Corp. today is advancing its spot market quotations on 26-28 gravity zero fuel oil from 80 cents to 90 cents, and the contract price advances to 82½ cents, the limit under the current crude oil price basis. This company is also advancing the price on the open market of its 32-36 special gas oil, which is suitable for use as a No. 2 heating oil with its 190° F. flashpoint. The price last week was 2⅞ cents and the price effective today is 3⅛ cents. On contract this material cannot advance beyond 2½ cents until the crude oil advance is general. The price on its 28-30 zero fuel oil has been moved up to $1.20 a barrel by Sinclair Oil & Refining Co. This is not an ordinary grade of material, however, as the flashpoint is 155° F., and the firepoint is 185° F., while the gravity narrows to 29-30. Another good indication of the statistical position of the heating oils is found in the fact that certain distributors have turned to a crude oil in order to supply their trade. That this is not a bad alternative may be gathered from the following characteristics of this crude oil: 24-26 gravity, 170-180 flashpoint, 40 below zero cold test, 60-70 sec. at 100° F. viscosity, and less than 0.25 per cent sulphur. Several cars of this material have been sold to the trade in Chicago at $1.20 a barrel, Group 3. In the heavier fuel oils, zero cold test, advances are noted in the Chicago switching district where prices have been about 15 cents under ruling prices outside the district. Globe Oil & Refining Co. has advanced the price of the 18-22 fuel oil in the switching district to 40 cents, Group 3.

Monday's ruling tank car prices on the distillate and residual heating oils were as follows: 38-40 tractor fuel, light straw, 3⅝ to 3½ cents; 38-40 prime white distillate, 3⅝ to 3⅝ cents, with the top expected to go to 3¾ cents; 28-30 zero fuel oil, $1 to $1.10 a barrel; 26-28 zero fuel oil, 80 to 90 cents a barrel; 22-26 zero fuel oil, 70 to 75 cents a barrel; 18-22 zero, 52½ to 57½ cents; below 18 low cold test, 42½ to 47½ cents a barrel. The 36-38, 3¼ to 3⅜ cents, and the 32-36 dark zero gas oil, 190° flash, 3 to 3⅛ cents.

Heating Oil Tank Wagon Prices

A consideration of the tank car prices makes it apparent that the Chicago district distributors are anxious to see the tank wagon postings advanced. Members of the Chicago Oil Heat Institute, and the Empire, Deep Rock and Pure Oil companies, effective today, advanced the tank wagon postings on their heating oils Nos. 1, 2 and 3, half a cent, and their Nos. 4 and 5, a quarter of a cent as follows: No. 1, 7 cents; No. 2, light, 6¾ cents; No. 2, dark, 6½ cents; No. 3, 5¾ cents; No. 4, 4¾ cents, and No. 5, 4½ cents. Tops on the contracts remain unchanged as follows: No. 1, 8 cents; No. 2, light, 7¾ cents; No. 2, dark, 7½ cents; No. 3, 6¾ cents; No. 4, 5¾ cents; No. 5, 5¼ cents.

Coke Likewise Advances

Petroleum coke appears to be in good demand, and consumption this season is expected to outstrip former years. Empire and others have advanced their prices 50 cents, and the market ranges Monday appear as follows: Breeze (screenings), $5 to $5.50 a ton; still run, $5.50 to $6.50 a ton; lump and egg, $7.50 to $8 a ton.

Kerosene Markets Steady

While business was far from brisk Monday in the kerosene tank car markets, the scarcity of these materials and the strong position of the heating oils served to strengthen kerosenes following an eighth of a cent advance to the following ranges: 41-43 water white kerosene, 3½ to 3¾ cents; 42-44 water white material, 3⅝ to 3⅞ cents. Majors and semimajors are keeping out of the open markets and have their prices an eighth to a quarter of a cent higher.

The Special Naphthas

Principal sellers of special naphthas in the territory have advanced their spot market quotations a quarter of a cent, and indicate that further advances are likely before the close of the week. Some V.M.&P. naphtha, about 20 cars, was taken out of the open market last week by one of the large sellers. Monday's special naphtha prices reflect advances announced by American Mineral Spirits Co. and Deep Rock Oil Corp., as follows: Cleaner's naphtha, 6½ to 6¾ cents; lacquer diluent, 180-250, 7¾ to 8 cents; lacquer diluent, 140-200, 8¼ to 8½ cents; rubber solvent, 6¼ to 6½ cents; Stoddard solvent, 6 to 6¼ cents; petroleum thinner, 5¼ to 5½ cents; V.M.&P. naphtha, 6¼ to 6½ cents; heavy spirits, unchanged at 4 to 5¼ cents. Manufacturers and marketers are awaiting with keen interest any indications as to what some of the major refiners will do in the matter of 1933 prices when the new contracts come up for consideration.

Gasoline Tank Car Prices

While practically all of the gasoline business is moving on contract and the spot markets do not appear to attract interest, the gasoline tank car markets are considered firm except in quarters which are emphasizing the existence of extremely low-priced material. These observers also point out that the practice of allowing large distributors prices of as much as three-eighths of a cent below the published lows continues unabated. The ruling spot market prices were unchanged from last week, but there are any number of indications that these markets do not represent a true picture of marketing conditions in the territory.

Service Station Situation

An examination of the service station situation throughout this territory throws some light on the fact that these markets continue subnormal although outside of the territory there is a more encouraging aspect with Standard of New Jersey, Standard of New York, Standard of Ohio, Standard of Kentucky, Standard of Louisiana, Atlantic, Sinclair and others advancing their tank wagon and service station postings as well as their tank car markets. There is an ever-increasing number of price cuts in this territory, either overt or in some form of concession, and blame is divided about equally on excessive jobber margins, local protection, and gasoline tax evasion. With natural gasoline offered at 3½ cents, for the 26-70, and 3¾ cents for the 18-pound material, and naphthas selling at a low of 4¼ to 4½ cents, blending is out of the question in the light of current service station prices which in some points are below 10 cents, including state, Federal and any other taxes.

Here is the case of a responsible distributor and retailer who is selling his regular gasoline at the posted price of 15.1 cents in Chicago. The commercial grade is quoted at 5 cents, Group 3, but if it is supposed that this buyer is offered his gasoline at the low of the low octane gasoline, that is 4.50 cents, the margin which he has guaranteed his dealers, including local protection, leaves him in the hole as follows: 4.5 cents, cost of gasoline; 2.44 cents, Group 3 freight, state and Federal tax adds 4 cents, making a total of 10.94 cents. He has tried to compete with certain semimajors giving his dealers a 5-cent margin with local protection, and adding this 5 cents the figure is 15.94 cents and the price at the service station is 15.1 cents. Even if the guaranteed margin were the same as that of the most conservative major company, that is, 3.5 cents plus a half, or 4 cents, he would have a spread of 0.16 cent to cover other costs and represent profits. It is not surprising that distributors are reported in distress and that jobbers are said to be going out of the picture daily.

Recent Service Station Cuts

A survey just made of the price situation in the territory shows that price cuts ranging from 2 to 6 cents a gallon have recently been made in the territory at the following points: East St. Louis, Decatur, Centralia, Aurora, Kankakee, Geneva, Rockford, Ashley, Fairview, all in Illinois; Green Bay, Milwaukee, Reesville, LaCrosse, all in Wisconsin; Davenport, Des Moines, Dubuque, West Branch, New Hartford, all in Iowa; St. Louis, Kansas City, Moberly, St. Joseph, Rochester, all in Missouri; Albert Lea, Minneapolis, Hutchinson, Little Falls, Silver Lake, Ivanhoe, Faribault, Alexandria, all in Minnesota; Fargo, Grand Forks, North Dakota; Flandreau, Valley Springs, Alexandria, South Dakota; Evansville, New Castle, Richmond, Valparaiso, Middletown, Indiana; Grand Rapids, Detroit, Flint, Michigan; Hutchinson, Leoti, Kansas. Practically all of these reductions have been made in the third grade gasoline, and at only a few points have the cuts been met by the majors.

Panhandle Producers Seeking Relief From Drainage by Offsets

PAMPA, Tex., Oct. 29.—Characterizing production of the Danciger Oil & Refining Co. as inequitable, although temporarily sustained by a Supreme Court injunction, producers with offsets or nearby wells today asked the Railroad Commission to exempt these wells from the Panhandle's 45,000-bbl. allowable, but that the excess have no bearing on that figure.

Those making the requests included The Texas Company, Continental Oil, Skelly Oil, Gulf Production, Kewanee Oil & Gas and Stanolind. Ernest O. Thompson, member of the Railroad Commission, presided over the hearing.

A second matter on which evidence was taken was the production of independent producers to make the maximum production per well 100 bbls.

Before the hearing opened, the 150 producers sent a telegram to Governor R. S. Sterling at Austin asking him to call a special session of the legislature to amend proration laws "in such a way as to remove therefrom existing restrictions prohibiting it from preventing economic waste and from limiting production to market demand."

East Coast Refined Products Market Is Steady; Export Gasoline Higher on Gulf Coast

By A. E. MOCKLER
New York Bureau, The Oil and Gas Journal

NEW YORK, Oct. 31.—East Coast refinery markets for major products showed a steady undertone during the past week, with the situation somewhat complicated by the uncertain crude outlook in Texas. Gasoline, kerosene, fuel and gas oils, and Diesel oils were in steady position, with lub oil prices trending lower, and wax quotations again generally lower. Motor fuel volume was again adversely affected by unfavorable weather conditions.

The outstanding feature of the week was a further advance in export gasoline quotations at the Gulf, following a sharp upturn in export quotations f.o.b. Constanza on Rumanian refined products earlier in the month. The new price basis at Rumania makes high gravity gasoline at Constanza approximately 4.9 cents per gallon, just fractionally under the posted price at the U. S. Gulf, while heavy gasoline is now quoted at 3.7 cents per gallon, f.o.b. Constanza, representing a sharp increase over previous quotations at that point.

While no cargo business for export was placed at the Gulf during the week at the advanced price levels, the fact that Rumanian quotations had been advanced about to a parity with the U. S. Gulf had brightened the export outlook considerably, and sellers were looking for more activity in export circles. The working out of the compact with Rumania has tended to stabilize export markets, partially at least, leaving Russia as the sole remaining major disturbing factor in the world price position.

Refinery Gasoline

The recent price advances have been fully maintained, and practically all sellers are firm at the present price.

While present refinery gasoline prices show refiners little if any real margin on their refining operations, major companies are showing a tendency to keep prices close to bedrock until conditions within the marketing branch have been thoroughly adjusted. Leading refiners are no longer satisfied in establishing a price level for gasoline which serves as little more than a target for bulk operators to shoot at, and the large companies have shown an unmistakable willingness to meet competition whenever and wherever it may develop. As a result of this condition, "chiseling" by small marketers, who in the past have been able to wrest accounts away from the large refiners by cutting under established prices, is very much on the decline.

Cold and rainy weather again cut into gasoline gallonage in eastern refinery markets during the past week, but jobbers were still keeping their storage full in most instances, and indications are that the next price change, when it develops, will again be upward barring, of course, any overnight and revolutionary change in the crude oil situation.

The posted price for U. S. Motor gasoline, under 65 octane number, is held at 6¼ cents, tank car lots, f.o.b. terminals, at principal East Coast marketing centers, with the exception of Boston, where a range of 6¼ to 6½ cents is shown. For high test motor fuel, the price range is 6½ to 7 cents (the inside price applying where a flat price of 7 cents is posted.

Relatively little outside gasoline is now to contract buyers) except at Boston, coming into East Coast markets, and refiners thus are in position to push their campaign for stabilized markets with a minimum of interference.

The general protest aroused among oil interests by the admission of foreign "cleaners' solvent" and "painters' naphtha" at a duty of one-half cent per gallon, and the subsequent conversion of these products into "high octane gasoline" through the addition of natural gasoline has apparently stopped the import movement, and reported pending deals for additional cargoes of these products have evidently not been consummated.

East Coast refiners are adhering to their program of reduced runs at refineries and are making every effort to cut down both refinery holdings of motor fuel and stocks held at their bulk terminals, to further strengthen the statistical position during the winter.

Tank Wagon Gasoline

There have been no further changes in tank wagon and service station prices in East Coast territory, following the general increase a fortnight ago. Demand showed some slackening, due to unfavorable weather. While gallonage as a whole fell off, marketers reported their percentage of premium fuel sales was showing some slight increase, which was generally regarded as a constructive development.

Third grades are still a factor in some sections, but the extremely low retail prices of regular grades in most parts of the East has had a tendency to minimize the marketing of the extremely low priced motor fuel and refiners are getting away from this grade wherever possible.

Kerosene

Tank car movement was again reported to be running into large totals, and the market undertone remained steady, with leading refiners quoting 41-43 water white firm at 5½ cents in tank car lots at terminals. Jobbing demand was active, with continued replacement buying featuring the market.

The tank wagon division of the kerosene market was reflecting the strength and activity of the refinery group, and marketers reported a heavy gallonage. There was no general revision in tank wagon kerosene prices.

Lubs

Continued lack of demand for cylinder oils again exerted a depressing effect upon the market, and prices were forced lower on practically all grades under renewed selling pressure. The market for 600 filtered was unchanged at 23 cents with 600 Warren "E" likewise maintained at 20½ cents, but quotations on other grades, f.a.s. New York Harbor, were again revised, as follows: 600 steam refined, unfiltered, 18½ to 19 cents, off 1 cent; 650 steam refined, unfiltered, 20 to 21 cents, a drop of 1½ cents; 600 flash, steam refined, 21 to 22 cents, off 1½ cents; 630 flash, s.r., 25 to 26 cents, 2 cents under the previous quotation; bright stock, No. 8 color, 26 cents, a drop of 1 cent; and bright stock, No. 6½ color, diluted, 25½ cents, likewise 1 cent lower.

Conditions in the market for neutral oils were much the same with but routine demand reported and prices quotably unchanged.

Bunker "C" Oil

Fuel oil markets were showing a steady tone, with major refiners continuing to post 75 cents per barrel, bulk at terminals, or 80 cents per barrel barged alongside within harbor limits. Demand was fairly active, both in the spot market and for contract deliveries.

Refiners are making substantial progress with their contract operations for 1933, and it is reported that practically all of the marine business for the coming year has already been booked, with no major "upsets" in the handling of the major accounts.

The only cloud on the fuel oil market's horizon is the uncertainty regarding the permanency of crude oil prices in the Southwest, but this does not affect contracting operations for the coming year, as buyers are to get deliveries at the price prevailing on the date of delivery, with a guaranteed maximum price for the full year.

Diesel Oil

As was the case in the Bunker "C" oil market, most of the activity in Diesel oil trade circles was confined to bookings for 1933 deliveries, with prevailing conditions the same as in the bunker oil market.

Spot Diesel oil remains unchanged at $1.65, terminal, or $1.71½ f.a.s. for the 28-30 gravity grade, with a moderate movement reported.

Industrial Diesel oil sales were running into fair gallonage totals, with the market held unchanged at 4 cents for 26-30 gravity oil in tank car lots, f.o.b. terminals.

Gas Oil

Refinery movement of gas oil was well maintained and leading sellers continued to post 4 cents for 28 gravity plus recycled oil, in tank car lots, at terminals. Contract movement still accounts for the bulk of the gallonage locally, with these shipments going out at about a half cent under the spot price.

The tanker Phoenix, with carrying capacity of slightly over 77,000 bbls., was reported chartered to move a cargo of California gas oil from California to an East Coast port, north of Hatteras, November loading. Considerable gas oil has been reaching the Atlantic Seaboard in recent months, but most of it has represented contract deliveries to large utility companies in this area.

Furnace Oil

Spot demand in the refinery market continued active, and posted prices were steady and unchanged at 4 cents for 32-36 gravity oil, 5 cents for 36-40 oil, and 3½ cents for 21 gravity industrial furnace oil.

No changes developed in the tank

(Continued on Page 48)

Exports and Imports of Refined Products; Receipts of California Oils in the East

NEW YORK, Oct. 31.—Following the heavy export movement of the preceding week, export shipments of refined petroleum products showed a sharp drop locally during the week ended October 22. Inquiry continued fairly active, however, and a larger movement is looked for shortly. Considerable stocks of low priced cylinder oils have been taken off the eastern market by export buying, but a large part of these purchases are moving out of the port of Philadelphia, where a fair volume of gasoline exports has also recently developed.

The following table shows exports of principal refined petroleum products reported from the local port during the past three weeks (all figures in gallons unless otherwise noted):

	Week ended		
	Oct. 22	Oct. 15	Oct. 8
Gasoline	140,000	165,000	40,000
Naphtha	.....	810,000	55,000
Kerosene	5,000	6,000	9,000
Fuel and gas oil	123,000	14,000	12,000
Lubricating oil	4,960,000	570,000	718,000
Petroleum, refined	110,000	595,000	390,000
	Pounds		
Petrolatum	75,000	.....	.....
Paraffin wax	460,000	1,190,000	2,095,000
Refined	390,000	388,000	140,000
Scale	365,000	95,000	612,000
Lubricating grease	310,000	675,000	540,000

Higher refined products prices at the Gulf Coast export markets, particularly on kerosene and gasoline, and the market for cased goods is consequently tending higher. The competition of Rumania and Russia continues a potent factor, however, although in the past few months outlets for American oil products appear to have been opening up a little more freely.

Imports

Imports of crude and refined petroleum at the principal United States ports for the week ended October 22 totaled 621,000 bbls., a daily average of 88,714 bbls., compared with 948,000 bbls., a daily average of 135,429 bbls., during the previous week, and a daily average of 104,571 bbls. for the three weeks ended October 22. Details follow:

(Barrels of 42 gallons)

At Atlantic Coast Ports—	
Baltimore	99,000
New York	169,000
Philadelphia	285,000
Others	68,000
Total	621,000
Daily average	88,714
Daily average four weeks	104,571

The week's imports comprised 384,000 bbls. of crude petroleum, 176,000 bbls. of fuel oil, and 61,000 bbls. of kerosene, the latter coming in from Constanza, Rumania.

California Oil Receipts

Receipts of California crude and refined petroleum at Atlantic Coast ports during the week ended October 22 totaled 367,000 bbls., a daily average of 52,429 bbls., compared with 267,000 bbls., a daily average of 38,143 bbls., for the previous week and a daily average of 39,214 bbls. for the four weeks ended October 22. There were no receipts of California oil at the Gulf during the week. East Coast receipts included 48,000 bbls. at New York, 172,000 bbls. at Philadelphia, and 147,000 bbls. at other ports, and were made up of 79,000 bbls. of gas oil and 288,000 bbls. of gasoline.

At the close of the week two cargoes were reported afloat for East Coast ports from California, as follows:

For Baltimore—73,500 bbls. of gas oil on the tanker La Brea (Union Oil Co. of California boat).

For Philadelphia—117,000 bbls. of gasoline on the tanker Northern Sun (Sun Oil Co. boat).

REFINERY AND CRUDE PRICES

Quotations on refined products are for interstate or export movement except as otherwise noted

EXCLUSIVE OF TAXES

The following quotations are exclusive of the Federal excise taxes of 1 cent a gallon on gasoline and 4 cents on lubricating oils, which became effective June 21, 1932.

Gasolines

OKLAHOMA (Group 3)—	Nov. 1		Oct. 25	
*U. S. Motor	.04⅜	.04¾	.04½	.04¾
60-62 400	.04⅝	.04¾	.04⅝	.04¾
64-66 390	.04¾		.04¾	
64-66 375	.04¾	.05	.04¾	.05
68-70 350	.05	.05¼	.05	.05¼
NORTH TEXAS—				
*U. S. Motor	.04¼	.04½	.04⅜	.04½
60-62 400	.04½	.04⅝	.04½	.04⅝
64-66 390	.04⅝	.04¾	.04⅝	.04¾
64-66 375	.04¾		.04¾	
64-66 360	.04⅞	.05	.04⅞	.05
†NORTH LOUISIANA—				
*U. S. Motor	.05		.05	
60-62 400	.05¼		.05¼	
†ARKANSAS—				
*U. S. Motor	.05		.05	
CHICAGO (Based on Oklahoma Group 3)—				
*U. S. Motor	.04½	.04¾	.04½	.04¾
60-62 400	.04⅝	.04¾	.04⅝	.04¾
64-66 375	.04⅞	.05⅛	.04⅞	.05⅛
Aviation fighting grade	.05½	.05¾	.05½	.05¾
68-70 360	.05⅛	.05⅜	.05⅛	.05⅜

Octane Ratings—Above quotations cover price ranges on gasoline in which no octane rating is given. On November 1, in the case of the U. S. Motor and 60-62 400 endpoint grades, where an octane rating of 57-65, inclusive, is guaranteed, prices are three-eighths cent per gallon higher than quotations shown in above tables; where an octane rating of better than 65 is guaranteed, the prices are five-eighths cent higher. In the case of the remaining grades, gasolines of 65 octane rating or higher are quoted one-half cent higher than the quotation shown in above tables.

Unless otherwise provided by agreement of buyers and sellers, the Series 30 testing equipment of the Ethyl Gasoline Corp. is recognized as standard in determining octane ratings.

*Present distillation specifications on U. S. Motor gasoline are: 10 per cent evaporated, 167° F. maximum; 50 per cent, 284° F. maximum; 90 per cent, 392° F. maximum; residue not exceeding 2 per cent; maximum vapor pressure, 12 pounds. Additional specification on U. S. Motor gasoline available from bulletins of Bureau of Mines, Washington, D. C.

†For Arkansas, Louisiana and Mississippi delivery.

PENNSYLVANIA (inland refineries)—				
U. S. Motor	.05¾	.06	.05¾	.06
60-62 400	.06	.06¼	.06	.06¼
64-66 375	.06¼		.06¼	
68-70 350	.06½		.06½	

Octane Ratings—In the case of U. S. Motor and 60-62 400 endpoint grades, same price differentials based on octane ratings as shown in above tables for Oklahoma and other Mid-Continent areas:

CALIFORNIA—(domestic movement only)—				
54-58 U. S. Motor	.06	.06¾	.06	.06½
58-60 400	.07	.07½	.06¾	.07
EAST COAST—				
U. S. Motor, below 65 octane:				
New York (Bayonne)	.06¼		.06¼	.07
Boston	.06¼	.06½	.06¼	.06½
Baltimore, Md.	.06¼		.06¼	.07
Charleston, S. C.	.06¼		.06¼	.07
U. S. Motor, 65 octane and above:				
New York (Bayonne)	*.06½	.07	.06½	.07
Boston	.07		.07	.07½
Baltimore, Md.	*.06½	.07	.06½	.07
Charleston, S. C.	*.06½	.07	.06½	.07
GULF COAST (domestic)—				
U. S. Motor, 65 octane and above	.05½	.05¾	.05½	
U. S. Motor, below 65 octane number	.04¾	.05	.04½	.04¾

*Contract price.

Naphthas

OKLAHOMA (Group 3)—	Nov. 1		Oct. 25	
50-52 450 (blending)	.04¼	.04½	.04¼	.04½
PENNSYLVANIA (inland refineries)				
50-54 430-450 (blending)	.05¾	.06	.05¾	.06
ARKANSAS—				
48-50 450 (blending)	.05		.05	
CHICAGO (Based on Oklahoma Group 3)—				
50-52 450 (blending)	.04¼	.04½	.04⅛	
Cleaners' naphtha, 56-58 gr., 200 i.b.p.-320 e.p.	.06¼	.06½	.06¼	.06½
Lacquer diluent, 180 i.b.p.-250 e.p.	.07¾	.08	.07½	
Lacquer diluent, 140 i.b.p.-200 e.p.	.08¼	.08½	.08	
Rubber solvent, 68-70 gr., 100 i.b.p.-300 e.p.	.06¼	.06½	.06	.06¼
Stoddard solvent, 300 i.b.p.-410 e.p. over 100° flash	.06	.06¼	.05¾	.06
Pet. thinner, 290, 300 i.b.p.-415 e.p., over 83° flash	.05¼	.05½	.05	.05¼
V.M.&P. naphtha, 56-58 gr., 190-200 i.b.p.-330 e.p.	.06¼	.06½	.06	.06¼
Petroleum spirits	.04	.05¼	.04	.05¼

Natural Gasolines

OKLAHOMA (Group 3)—	Nov. 1		Oct. 25	
Grade 18-55	.04		.03⅞	
Grade 26-70	.03¼		.03¼	
Grade 30-70	.03⅛		.03⅛	
*Low pressure grades:				
15 lb. v.p. (max.)	.04⅜	.04½	.04⅛	.04¼
11 lb. v.p. (max.)	.04¾		.04½	.04⅝
NORTH TEXAS—				
Grade 18-55	.04		.03⅞	
Grade 26-70	.03¼		.03⅛	.03¼
Grade 30-70	.03⅛		.03	
*Low vapor grades:				
15 lb. v.p. (max.)	.04⅜	.04½	.04⅛	.04¼
11 lb. v.p. (max.)	.04¾		.04½	
NORTH LOUISIANA—				
Grade 26-70	.03½		.03½	
CALIFORNIA—				
75-78 375	.04¾	.05½	.04½	.05½

Note—Grades 18-55, 26-70 and 30-70 are three of 24 grades adopted by the Natural Gasoline Association of America effective January 1. The grades are based on pounds vapor pressure and amount evaporated at 140° F. While not exactly the same specifications apply, Grade 18-55 corresponds to the former Grade A, Grade 26-70 to former Grade AA and Grade 30-70 to former Grade BB.

*All low vapor pressure grades have minimum recovery of 96 (natural gasoline method).

Kerosenes

(All kerosenes water white)

OKLAHOMA (Group 3)—	Nov. 1		Oct. 25	
41-43	.03⅝	.03¾	.03⅜	.03½
42-44	.03¾	.03⅞	.03½	.03⅝
NORTH TEXAS—				
40-41	.03⅜	.03½	.03¼	
41-43	.03½	.03⅝	.03¼	.03⅜
†NORTH LOUISIANA—				
41-43	.04		.04	
42-44	.04¼		.04¼	
†ARKANSAS—				
41-43	.04		.04	
PENNSYLVANIA (inland refineries)—				
45	.04⅝	.04¾	.04⅝	.04¾
46	.04¾	.04⅞	.04¾	.04⅞
47	.04¾	.05	.04¾	.05
CHICAGO (Based on Group 3)—				
41-43	.03½	.03¾	.03⅜	.03½
42-44	.03⅝	.03⅞	.03½	.03⅝
*CALIFORNIA—				
38-40 high burning test	.04	.04¾	.04	.04¾
NEW YORK (Bayonne, N J.)—				
41-43	.05½		.05½	
GULF COAST (domestic)—				
41-43 water white	.04¾	.05	.04¾	.05

*For Pacific Coast consumption.

†For Arkansas, Louisiana and Mississippi delivery.

Tractor Fuels*

OKLAHOMA (Group 3)—	Nov. 1	Oct. 25
39-40 prime white	.03¾	.03¼
38-40 light straw	.03¼	.03⅛
NORTH TEXAS—		
38-40 light straw	.03¼	.03⅛
CHICAGO (Based on Group 3)—		
38-40 light straw	.03⅜ .03½	.03¼ .03⅜
PENNSYLVANIA (inland refineries)—		
41-43 prime white	.04¼	.04¼

*There are no standard specifications for tractor fuels. Grades commonly sold have flash under 175° F. (open cup) and under 575° F. endpoint and less than .2 per cent sulphur. Tractor fuels are available from all Mid-Continent refining groups at prices in line with the Oklahoma market taking into consideration differentials in freight rates.

Furnace Oils*

OKLAHOMA (Group 3)—	Nov. 1		Oct. 25	
32-36 straw	.02⅞	.03	.02⅞	
36-38 straw	.03	.03¼	.03	
38-40 straw	.03¼	.03½	.03¼	
39-41 prime	.03¼	.03⅜	.03¼	
NORTH TEXAS—				
38-40 straw	.03⅛	.03¼	.03	.03⅛
†NORTH LOUISIANA—				
36-40	.04		.04	
†ARKANSAS—				
32-36	.03⅛	.03¼	.03⅛	.03¼
CHICAGO (Based on Group 3)—				
32-36 straw	.03¼	.03¼	.02⅞	.03
38-40 straw	.03⅜	.03½	.03⅛	.03¼
PENNSYLVANIA (inland refineries)—				
40-41 prime white	.03¾	.04	.03¾	.04
NEW YORK (Bayonne, N. J.)—				
32-36	.04		.04	
36-40	.05		.05	
21 (industrial)	.03½		.03½	

*Above prices are for furnace oils of zero cold test under 190° F. flash and good odor.

†For Arkansas, Louisiana and Mississippi delivery.

Gas Oil, Diesel Oil and Fuel Oil

Gas oil (G.O.) quoted per gallon basis; Diesel oil and fuel oil per barrel.

OKLAHOMA (Group 3)—	Nov. 1		Oct. 25	
32-36 (G.O.) cracking stock	.02	.02½	.02	.02⅛
U.G.I. (G.O.)	.02	.02½	.02	.02⅛
32-36 zero to 15 (G.O.) high flash	.02⅝	.02¾	.02⅝	.02¾
28-30, zero to 10	1.00		.90	1.00
26-30, zero to 10	.85	.90	.75	.80
24-26	.60	.65	.60	.65
20-22	.55	.60	.55	
16-20	.50	.55	.50	.52½
Below 16	.45	.47½	.45	.47½
NORTH TEXAS—				
32-36 (G.O.) industrial	.01⅞	.02	.01⅞	.02
22-26	.45	.50	.40	.45
Below 20	.40	.45	.40	.45
NORTH LOUISIANA—				
32-36 (G.O.) zero	.03		.03	
14-16	.35	.40	.35	.40
†ARKANSAS—				
32-36 (G.O.) zero high flash	.03		.03	
14-16	.35	.40	.35	.40
CHICAGO (Based on Group 3)—				
32-36 (G.O.) industrial	.02	.02½	.02	.02⅛
28-30 (zero)	1.00	1.10	.95	1.05
22-26	.70	.75	.65	.70
18-22	.52½	.57½	.50	.55
Below 18	.42½	.47½	.40	.45
PENNSYLVANIA (inland refineries)—				
36-40	.03¼	.03½	.03¼	.03½

Note—Fuel oils of more than 40 cold test generally 5 to 10 cents per barrel less in all areas than shown in above tables.

†For Arkansas, Louisiana and Mississippi delivery.

CALIFORNIA—				
30-34 (G.O.) per bbl.	.75	.85	.75	.85
27 plus Diesel	.75	.85	.75	.85
15-19 bunker (at tidewater)	.55	.65	.55	.65
15-19 (cargo lots)	.50	.60	.50	.60
15-19 (tank car)	.40	.60	.40	.60
GULF COAST—				
28-30 (G.O.)	.03½	.03¾	.03⅜	.03½
28-30 Diesel	1.50	1.65	1.65	
Bunker C (bulk cargoes)	.45	.50	.45	.50
Bunker C (bunkers)	.60		.60	
NEW YORK (Bayonne, N. J.)—				
28 plus (G.O.)	.04		.04	
*28-30 Diesel	1.65		1.65	
26-30 Diesel (tank cars)	.04		.04	
†Bunker C	.75		.75	

*Lighterage 6½ cents per barrel.

†Lighterage 5 cents per barrel.

Petroleum Coke*

Prices per ton f.o.b. refineries in Chicago area.

Breeze (screenings)	5.00	5.50	5.00	
Still runs	5.50	6.50	5.00	6.00
Lump and egg	7.50	8.00	7.50	

*Refineries will absorb freight to 80 cents a ton.

Neutral Oils

(Viscosity at 100° F. and color)

OKLAHOMA (Group 3)— Nov. 1			Oct. 25	
Zero to 10 Cold Test:				
150-3	.06¼	.06½	.06¼	.06½
180-3	.07½	.07¾	.07½	.07¾
180-4	.07	.07¼	.07	.07¼
200-3	.08¼	.08½	.08¼	.08½
200-4	.08	.08¼	.08	.08¼
240-3	.09¾	.10	.09¾	.10
240-4	.09¼	.09½	.09¼	.09½
280-3	.11¼	.11½	.11¼	.11½

280-4	.10¼	.10½
300-3.5	.11¾	.12
350-3.5	.12¼	.12½
400-4	.12¾	.13
500-4.5	.13¼	.13½
100-2 paraffin oil	.04¼	.04½
15-30 Cold Test:		
200-3	.07¾	.08
200-4	.07½	.07¾
240-3	.09¼	.09½
240-4	.08¾	.09
280-3	.10¾	.11
280-4	.09¾	.10
PENNSYLVANIA—		
150 vis., No. 3, 400-405:		
Zero pour test	.13½	.14
10 pour test	.12½	.13
15 pour test	.10½	.11
25 pour test	.10	
30 pour test	.09¾	
180 vis., No. 3, 25 pour test	.12¾	.13
200 vis., No. 3:		
Zero pour test	.19	.20
10 pour test	.18	.19
15 pour test	.17	
25 pour test	.15	.15½
30 pour test	.15	
GULF COAST—		
Pale Oils:		
100-2-2½	.04¾	.05
200-3	.06	.06¼
300-3	.07	
500-3½	.08¾	.09
750-3½	.09¾	.10
1,200-3½	.11¾	.12
2,000-4	.12½	.13
Red Oils:		
200-5-6	.05	
300-5-6	.05¾	.06
500-5-6	.07¾	.08
1,200-5-6	.10¾	.11
2,000-6 plus	.12½	.13
CALIFORNIA—		
Pale Oils:		
100-2½-3	.08	.08½
200-2½-3	.08¾	.09½
300-3-3½	.10	.10½
350-3-4	.10½	.10¾
400-3-4	.10¾	.11
450-3-4	.11¼	.12
550-3-4	.12	.12½

Red Oils:		
200-4½-5	.08½	.09
300-5-6	.09¼	.10
350-5-6	.10	.10¾
400-5-6	.10¾	.11¼
450-5-6	.11¼	.11½
500-5-6	.11½	.12
600-5-6½	.12	.12¼
700-6½ plus	.12¼	.12½
750-6½ plus	.12¼	.12½
900-6½ plus	.13	.14½

Bright and Steam Refined Stocks

OKLAHOMA (Group 3)—	Nov. 1		Oct. 25	
630 light green	.07¾	.08	.07¾	.08
600 light green S.R.	.05	.06	.05	.06
600 dark green S.R.	.04	.04½	.04	.04½
Bright Stocks:				
190-200 D	.18		.18	
150-160 D, 0-10	.17		.17	
150-160 D, 10-25	.16½		.16½	
150-160 D, 25-40	.16		.16	
150-160 E	.16		.16	
PENNSYLVANIA—				
600 S.R.	.11	.11¼	.11	.11¼
650 S.R.	.13¼	.13¾	.13¼	.13¾
600 Pennsylvania flash	.14¼	.14½	.14¼	.14½
630 D filtered	.19¼	.19½	.19¼	.19½
600 E filtered	.14½	.15	.14½	.15
Pennsylvania Grade bright stock:				
Bright Stock, No. 8 color, 145-50 vis. 210-540-550 flash:				
10 pour test	.24	.25	.24	.25
15 pour test	.21½	.22	.21½	.22
25 pour test	.20	.21	.20	.21

Wax and Petrolatum

(Prices per pound)

OKLAHOMA (Group 3)—	Nov. 1		Oct. 25	
124-126 white crude scale	.01¾	.01⅞	.01¾	.01⅞
PENNSYLVANIA—				
122-124	.01⅞	.02	.01⅞	.02
124-126	.02		.02	
NEW YORK (Bayonne, N. J.)—				
Refined Wax:				
120-122	.02⅜		.02⅝	
125-127	.02¾		.02⅞	
130-132	.03¼		.03½	

133-135	.03⅞	.04⅛
135-137	.04¼	.04¼
Petrolatum in barrels in carload lots:		
Dark green	.01¾	.01¾
Amber	.02⅛	.01⅛
Extra amber	.02½	.02½
Cream	.04⅝	.04⅝
Lily white	.05½	.05½
Snow white	.06½	.06½

Export Prices

GASOLINE

GULF COAST—	Nov. 1		Oct. 25	
U. S. Motor	.04⅜		.04⅜	
60-62 400	.04⅜		.04⅜	
61-63 390	.04½		.04½	
64-66 375	.04⅝		.04⅝	
LOS ANGELES, CALIF.—				
U. S. Motor, 53-55 437 e.p.	.03¾	.04¼	.03¾	.04¼
U. S. Motor, 65 octane num.	.05		.05	
U. S. Motor, 67 octane num.	.05¼		.05¼	
U. S. Motor, 69 octane num.	.05½		.05½	
58-60 400 endpoint gasoline	.04¼	.05	.04¼	.05

KEROSENE

GULF COAST—				
41-43 prime white	.04⅜	.04½	.04⅜	.04½
41 water white	.04½		.04½	
LOS ANGELES, CALIF.—				
41-43 water white	.03¾	.04¼	.03¾	.04¼

LUBRICANTS

NEW YORK, (f.a.s. in bbls.)—				
600 filtered			.23	
600 Warren E			.20½	
600 S.R. unfiltered	.18½	.19	.19	
650 S.R. unfiltered	.20	.21	.21½	
600 flash S.R.	.21	.22	.22½	
630 flash S.R.	.25½	.26	.27½	
Bright stock, No. 8 color	.26		.27	
Bright stock, No. 6½ color, dil.	.25½		.26½	

NEUTRALS

NEW YORK—Pale Engine Oil, Bulk (vis. at 100):				
230-3¾	.10	.10¼	.10	.10¼
180-3¼	.09½	.09¾	.09½	.09¾
100-2¼	.05	.05½	.05	.05½
Red Engine Oil, Bulk (vis. at 100):				
300-6½	.09½	.09¾	.09½	.09¾
250-6	.09	.09¼	.09	.09¼
200-6	.08½		.08½	

Crude Oil Prices

Oklahoma, Kansas, North and East Central Texas

East Texas (Oct. 15, 1932)* $1.10
East Texas (Oct. 1, 1932)† ..... .98
Corsicana heavy (Oct. 15, 1932)‡ ..... .74
Other fields ..... See gravity table

*Posted by Sun Oil Co., Sinclair Prairie Oil Marketing Co., Magnolia Petroleum Co., Panola Pipe Line Co., The Texas Company, Gulf Pipe Line Co., Toronto Pipe Line Co.
†Posted by Humble Oil & Refining Co., October 1, 1932; posted by Tidal Refining Co. and Atlas Pipe Line Co., April 11, 1932.
‡Magnolia Petroleum Co.

Eastern States

JOSEPH SEEP PURCHASING AGENCY
(Effective October 3, 1932)

Pennsylvania Grade Oil in National Transit Lines (Bradford Field) $1.72
Pennsylvania Grade Oil in Southwest Pennsylvania Lines 1.42
Penna Grade Oil in Eureka Pipe Line Lines 1.37
Penna Grade Oil in Buckeye Pipe Line Lines 1.22
Corning Grade Oil in Buckeye Pipe Line Co.'s line (Oct. 4, 1932) ..... .85
Ragland Grade Oil in Cumberland Pipe Lines (Kentucky) (Jan. 10, 1931) ... .60

PENNZOIL CO.
(Effective October 3, 1932)

Pennsylvania Grade Oil in National Transit Lines:
Group A $1.67
Includes Cochran, Franklin, Hamilton and Doolittle districts.
Group B 1.66
Includes Titusville district.
Group C 1.65
Includes Turkey and Tidiout districts.
Group D 1.64
Includes Bear Creek and Porkey districts.
Group E 1.62
Includes Eldenau, Bull Creek, Rough Run, Carbon, Dipner, Bredin, McJunkin, Jameson, Kennerdell, Emlenton, Tiona, Lacy and Kinzua districts.
Price depends on length of pipe line haul to plant at Oil City.

TIDE WATER PIPE CO.
(Effective October 3, 1932)

Bradford, Pa. $1.72
Allegany, N. Y. 1.72

PURE OIL CO.
(Effective October 3, 1932)

Cabin Creek, W. Va. $1.37
Bradford Hollow, W. Va. 1.37
Kelly's Creek, W. Va. 1.37

West Texas

Iatan and Westbrook..Same as North Texas
Crane, Upton, Crockett, Howard, Glasscock, Mitchell, Ector, Winkler and Pecos counties ..... See note below
Lea County, New Mexico ..... (See Rocky Mountain States)
Teborg, Pecos County* ..... $ .65

Note—Effective October 15, 1932, The Texas Company, Magnolia Petroleum Co., Shell Petroleum Corp. and Gulf Pipe Line Co., 75 cents; effective April 11, 1932, Humble Oil & Refining Co. and Stanolind Oil & Gas Co., 65 cents.
*Shell Petroleum Corp., effective October 15, 1932.

Texas Panhandle

Gray County, Wheeler County and Carson-Hutchinson Counties....See gravity table

Rocky Mountain States

OHIO OIL CO.-MIDWEST REFINING CO.
Iles, light (Aug. 24, 1931) ..... $ .75
Iles, heavy (Aug. 24, 1931) ..... .53
Fort Collins (Apr. 11, 1932) ..... .86
Florence (Apr. 11, 1932) ..... .80
Wellington (Apr. 11, 1932) ..... .76
Greasewood Dome, Colo. (Apr. 11, 1932) 1.00
Dutton Creek, Wyo. (Apr. 11, 1932) ..... .82
Rock Creek, Wyo. (June 1, 1932) ..... .90
Frannie, light (Nov. 3, 1931) ..... .61
Frannie, heavy (Nov. 3, 1931) ..... .51
Salt Creek ..... See Stanolind Mid-Continent price schedule
LaBarge ..... Mid-Continent gravity scale
Big Muddy (Apr. 11, 1932) ..... .98
Grass Creek (June 1, 1932) 1.10
Elk Basin (June 1, 1932) 1.10
Lance Creek (Apr. 11, 1932) 1.15
Poison Spider (Mar. 5, 1931) ..... .70
Notches (Mar. 14, 1927) ..... .65
Hudson (June 2, 1931) ..... .65
Lander (Mar. 5, 1931) ..... .40
Rex Lake (Feb. 22, 1930) 1.10
Osage (Apr. 15, 1931) ..... .98
Lost Soldier (Apr. 12, 1932) ..... .80
Hamilton Dome (Nov. 3, 1931) ..... .45
Greybull (Apr. 11, 1932) 1.20
Cat Creek (Apr. 11, 1932) 1.20
Pondera (Nov. 3, 1931) ..... .90
Sunburst, Mont. (Apr. 11, 1932) 1.05
Hogback, N. Mex. (Aug. 24, 1931) ..... .80
Border, Mont. 1.55
Red Coulee, Alberta 1.55
Lea County, N. Mex. ..... See note below
Maljamar (Apr. 11, 1932) ..... .60
Artesia-Jackson (Apr. 11, 1932) ..... .65

Note—Salt Creek, Cat Creek, Dry Creek, Dallas-Derby, Hudson, Greybull, Hogback, and Iles by Midwest Refining Co. and remainder by Ohio Oil Co. Both companies posted Grass Creek, Light and Elk Basin. Lost Soldier posted by Producers & Refiners Corp. Artesia, Jackson and Maljamar posted by Continental Oil Co. Border and Red Coulee posted by Imperial Refining Co. Lea County, effective October 15, The Texas Company and Shell Petroleum Corp., 75 cents; effective April 11, 1932, Humble Oil & Refining Co., 65 cents. Fort Collins, Wellington, Orchard, Florence, Rattlesnake and Table Mesa by Continental Oil Co. Osage posted by Arro Oil & Refining Co.

Gulf Coast

Grade A and Grade B specifications discontinued by leading buyers ..... See gravity table
Jennings, La. (Apr. 11, 1932)* ..... $ .75
Lockport, La...See Gulf Coast gravity table
Refugio, light ..... See gravity table
Refugio, heavy (Apr. 11, 1932)‡ ..... .80
Markham (Oct. 15, 1932)¶ ..... See Gulf Coast gravity schedule
High Island (Apr. 11, 1932)¶ ..... See Gulf Coast gravity schedule

*Gulf Refining Co. ‡Humble Oil & Refining Co. ¶The Texas Company. ¶Yount Lee Pipe Line Co.

(Continued on Next Page)

Crude Oil Gravity Table

Degrees gravity—	1 Kansas, Oklahoma, North Texas, East Central and Central Texas	2 Kansas, Oklahoma, North Texas, East Central Texas and Central Texas	3 North Louisiana and Arkansas	4 North Louisiana and Arkansas	5 Hutchinson, Carson and Moore Counties, Texas	6 Gray County, Texas	7 Hutchinson, Carson and Moore Counties, Texas	8 Gray County, Texas	9 Gulf Coast Texas and Louisiana	10 Gulf Coast Texas and Louisiana	11 Cameron Meadows, Louisiana	12 Salt Creek and La Barge, Wyoming
Below 25	....	....	$ .80	$ .68	....	....	....	....	$ .90	$ .80	$ .80	....
25-25.9	....	....	.82	.70	....	....	....	....	.91	.81	.81	....
26-26.9	....	....	.84	.72	....	....	....	....	.92	.82	.82	....
27-27.9	....	....	.86	.74	....	....	....	....	.93	.83	.83	....
28-28.9	....	....	.88	.76	....	....	....	....	.94	.84	.84	....
Below 29	$ .88	$ .76	....	....	....	....	....	....	....	....	....	$ .76
29-29.9	.90	.78	.90	.78	$ .65	$ .77	....	....	.95	.85	.85	.78
30-30.9	.92	.80	.92	.80	.67	.79	....	....	.96	.86	.86	.80
31-31.9	.94	.82	.94	.82	.69	.81	....	....	.97	.87	.87	.82
32-32.9	.96	.84	.96	.84	.71	.83	....	....	.98	.88	.88	.84
33-33.9	.98	.86	.98	.86	.73	.85	....	....	.99	.89	.89	.86
34-34.9	1 00	.88	1 00	.88	.75	.87	$ .66	$ .76	1 00	.90	.90	.88
35-35.9	1.02	.90	1.02	.90	.77	.89	.68	.78	1.01	.91	.91	.90
36-36.9	1 04	.92	1 04	.92	.79	.91	.70	.80	1 02	.92	.92	.92
37-37.9	1.06	.94	1.06	.94	.81	.93	.72	.82	1.04	.94	.94	.94
38-38.9	1 08	.96	1 08	.96	.83	.95	.74	.84	1 06	.96	.96	.94
39-39.9	1.10	.98	1.10	.98	.85	.97	.76	.86	1.08	.98	.98	.94
40 and over	1.12	1.00	1 12	1.00	.87	.99	.78	.88	1.10	1.00	1.00	.94

Column 1—Effective October 15, in Kansas, Oklahoma, North Texas, East Central Texas and Central Texas by Sinclair Prairie Oil Marketing Co.; in Oklahoma, North Texas, East Central Texas and Central Texas by Magnolia Petroleum Co. (Magnolia's schedule begins below 28 degrees, 79 cents; 28-28.9 degrees, 88 cents, with 2 cents added for each degree upward to 40 and over at $1.12); in Kansas, Oklahoma and North Texas by Continental Oil Co.; in Oklahoma and North and Central Texas by The Texas Company; in Kansas and Oklahoma by Phillex Oil Co., Empire Pipe Line Co., Shell Petroleum Corp., Pure Oil Co., Gypsy Oil Co., National Refining Co.; in Oklahoma by Barnsdall Refineres, Inc., Deep Rock Oil & Refining Co., Producers Oil Co.; in North and Central Texas by the Gulf Pipe Line Co.; in Kansas by the Skelly Oil Co., Vickers Refining Co., White Eagle Oil Corp., Kanotex Refining Co.

Column 2—Effective April 11, in Kansas, Oklahoma and North Central Texas by the Stanolind Crude Oil Purchasing Co.; in Kansas and Oklahoma by Carter Oil Co.; in East Central, Central and North Texas by the Humble Oil & Refining Co.; in Oklahoma by Mid-Continent Petroleum Corp., Champlin Refining Co., Eason Oil Co., Pepper Gasoline Co.; in Kansas by Derby Oil Co. Effective October 28, 1932, Kanotex Refining Co.

Column 3—Effective October 15, by The Texas Company, Louisiana Oil Refining Co. and Magnolia Petroleum Co., as per schedule above and Gulf Refining Co., whose schedule begins at below 29 gravity, 88 cents.

Column 4—Effective April 11, Standard Oil Co. of Louisiana and Stanolind Oil & Gas Co.

Columns 5 and 6—Effective October 15, Phil Tex Oil Co., as per above schedules, The Texas Company and Magnolia Petroleum Co. Texas and Magnolia schedules begin at below 35 gravity at 87 cents in Gray County and below 35 gravity at 75 cents in Hutchinson and Carson Counties.

Columns 7 and 8—Effective April 11, Humble Oil & Refining Co.

Column 9—Effective October 15, Sun Oil Co., Sinclair Prairie Oil Co., The Texas Company, Gulf Pipe Line Co., Pure Oil Co., Magnolia Petroleum Co. (in Lockport and Iowa Pools).

Column 10—Effective April 11 by Humble Oil & Refining Co. in Goose Creek, Hull, Liberty, Orange, Pierce Junction, Mykawa, Moss Bluff, Raccoon Bend, Barbers Hill, Sour Lake, Spindletop, Sugarland, West Columbia, Humble, Rabbs Ridge and Refugio light oil. Effective July 18, the Humble Oil & Refining Co. posted Conroe crude as follows: 35-35.9 gravity, 90 cents, with 2 cents added for each degree upward to 40 and over, at $1.

Column 11—Effective October 15, Magnolia Petroleum Co.

Column 12—Effective April 11, Midwest Refining Co.

(California Crude Oil Prices on Page 31)

TANK WAGON MARKETS

Quotations for gasoline and kerosene in United States, as furnished by the larger marketing concerns, include taxes

November 1, 1932

TAXES

The gasoline quotations given in the following tables include the 1-cent Federal tax as well as state, county and city taxes. The gasoline quoted is the regular or standard grade. In most marketing areas a third or competitive grade is generally available at 1.5 or more cents per gallon under the service station price for the regular grade. Ethyl Gasolines are sold 3 cents above the service station price for the regular grade.

Standard Oil Co. (Indiana)

	Gasoline Tank wagon	Service station	Incl'ds tax of	Kero. tank wagon
Chicago	15.1	15.1	4.0	10.0
Decatur, Ill.	17.6	17.6	4.0	10.1
E. St. Louis	16.9	14.9	4.0	9.3
Joliet	17.6	15.6	4.0	8.6
Peoria	17.6	15.6	4.0	10.1
Quincy	17.4	15.0	4.0	9.9
Davenport, Ia.	17.7	17.0	4.0	10.4
Des Moines	17.7	16.9	4.0	8.0
Mason City, Ia.	17.7	17.7	4.0	10.4
Sioux City	17.3	17.3	4.0	10.0
Duluth, Minn.	18.7	18.7	4.0	11.0
Mankato	18.3	18.3	4.0	8.1
Minneapolis	16.4	15.4	4.0	11.0
LaCrosse, Wis.	19.4	19.4	5.0	11.1
Green Bay, Wis.	18.8	18 8	5.0	10.5
Milwaukee	17.3	17.3	5.0	10.0
Madison	18.5	18.5	5.0	10.2
Detroit, Mich.	12.6	12.5	4.0	9.9
Grand Rapids	17.5	16.5	4.0	10.3
Saginaw	16.6	16.6	4.0	10.8
Evansville, Ind.	18.2	18.2	5.0	†13.9
Indianapolis	18.4	18.4	5.0	†14.1
South Bend	18.7	18.7	5.0	†14.4
Fargo, N. D.	20.1	20.1	4.0	13.0
Huron, S. D.	19.5	19.5	5.0	11.8
Sioux Falls	19.0	19.0	5.0	10.0
K. C., Mo.*	15.1	15.1	4.0	8.7
Springfield*	17.0	17.0	4.0	8.6
St. Louis	13.5	11.0	4.0	9.4
St. Joseph*	15.0	13.0	4.0	7.5
Wichita, Kans.	15.9	14.0	4.0	7.0
Bartlesville, Ok.	16.0	13.0	5.0	8.0

*State tax 2 cents, 1-cent city tax and 1-cent Federal tax.

†Includes 4-cent tax. Buyers of kerosene not used as motor fuel can secure refund of tax.

Effective November 4—New dump discount applicable on all grades of gasoline sold from tank wagon. Any tank wagon customer buying 25 gallons or more at one time will be given 1-cent discount per gallon off tank wagon price at time of delivery. Customers not under contract receive no other discount.

Effective January 1—Discounts on Q.D.A. on 500 gallons or more per month throughout territory; Red Crown Ethyl Gasoline, 2 cents off tank wagon price; Red Crown gasoline, 2½ cents off tank wagon price; Stanolind Blue gasoline, 1 cent off tank wagon price. On deliveries of 75,000 gallons or more each classification allowed 1 cent additional discount.

Discounts on resellers authorized agent's agreement: Same amounts as above except made off service station price instead of tank wagon price.

Stanolind Furnace Oil in Chicago

Effective October 20, 1932, prices f.o.b. Chicago, tank wagon prices: No. 1 (36-40 lt. stw. zero), 100 gallons or more, 6½ cents; No. 2 (30-34 stw. zero), 150 gallons or more, 6 cents; No. 3 (22-26 zero), 400 gallons or more 5.25 cents; No. 4 (12-16 zero), 400 gallons or more, 4¼ cents. Viscosity of No. 4, 90-115 at 100° F.

Fuel Oils

Chicago Oil Heat Institute Prices

Spot market prices on 350 gallons or over deliveries, and top prices on contracts, respectively: 38-40, 7 and 8 cents; 32-36 light, 6⅝ and 7⅝ cents; 32-36 dark, 6½ and 7½ cents; 28-30, 5⅝ and 6⅝ cents; 24-26, 4⅝ and 5⅝ cents; 18-22, 4½ and 5¼ cents. On deliveries of less than 350 gallons the spot price is one-half cent higher.

Southwestern District

MAGNOLIA PETROLEUM CO.

	Gasoline Tank wagon	Service station	Incl'ds tax of	Kero. tank wagon
Dallas, Tex.	13.5	16.0	5.0	7.0
Fort Worth	13.5	16 0	5.0	7.0
Houston	13.5	16.0	5.0	8.0
San Antonio	13 5	16.0	5.0	9.0
El Paso	15.0	17.0	5.0	10 0
Texarkana	*16.0	16.0	5.0	†11.0
Muskogee, Ok.	12 5	15.0	5 0	7.0
Okla. City	13.5	16.0	5.0	8.0
Tulsa	13.5	16.0	5 0	8 0
Ft. Smith, Ark.	*15.5	15.5	5.0	†10.0
Little Rock	*17.5	17.5	7.0	†10.0

*Less 2½ cents to dealers. †Less 2 cents to dealers.

Southern District

STANDARD OIL CO. (KENTUCKY)

	Gasoline Tank wagon	Service station	Incl'ds tax of	Kero. tank wagon
Atlanta, Ga.	20 0	20.0	7.0	11.0
Augusta	20.0	20.0	7.0	11.0
Macon	20 0	20 0	7.0	12.0
Savannah	20.0	20.0	7.0	12.5
Birm'ham, Ala.	21.0	21.0	7.0	11.0
Mobile	21.0	21.0	7.0	10 0
Montgomery	22.0	22.0	7.0	13.5
Jackson, Miss.	20.0	20.0	7.0	10.0
Vicksburg	20.0	20.0	7.0	10.5
Jack'ville, Fla.	19.0	19.0	8.0	12 0
Miami	20.0	20.0	8.0	12.5
Pensacola	18.0	18.0	8.0	11.5
Tampa	20.0	20 0	8 0	13.0
Lexington, Ky.	18.5	18.5	6.0	10 5
Covington	19.0	19.0	6.0	10.5
Louisville	17.0	17 0	6.0	9.0
Paducah	19.0	19.0	6.0	8.0

A third grade "Kyso Green" is sold at a price generally 2 cents below the price on the regular grade.

In addition to the state tax of 4 cents on gasoline, Montgomery has city and county tax of 2 cents on gasoline and one-half cent on kerosene. Kerosene prices in Georgia include 1-cent tax. In Florida, an inspection fee of 0.125 cent; in Alabama, an inspection fee of one-half cent on kerosene and one-fortieth cent on gasoline. To Pensacola, Montgomery and Birmingham state taxes add 1-cent tax. To Mobile state tax add 1-cent city tax. Dealers receive discount of 3 cents off tank wagon price throughout territory.

Rocky Mountain District

CONTINENTAL OIL CO.

	Gasoline Tank wagon	Service station	Incl'ds tax of	Kero. tank wagon
Denver, Colo.	16 0	19.0	5.0	13.5
Pueblo	16.0	19.0	5.0	12.5
Grand Jctn.	20.0	23.0	5.0	14 5
Casper, Wyo.	17.0	20.0	5.0	10.0
Cheyenne	16.0	19.0	5.0	11.5
Butte, Mont.	20 0	23.0	6.0	17.0
Billings	22 0	25.0	6.0	15.5
Great Falls	23.0	26.0	6.0	17.0
Helena	23 0	26 0	6.0	17 0
Salt Lake, Utah	18 0	21.0	5.0	16.0
Albu'que, N. M.	16.0	19.0	*7.0	14.0
Boise, Idaho	19.5	22.5	6.0	18.0
Twin Falls	19 5	22.5	6.0	18.0

*One-cent city tax.

Central South District

STANDARD OIL CO. (LOUISIANA)

	Gasoline Tank wagon	Service station	Incl'ds tax of	Kero. tank wagon
N. Orleans, La.	15.5	17.5	*7.0	†11.0
Baton Rouge	16.0	16.0	6.0	†10.0
Alexandria	14.5	14.5	*7.0	†11 0
Lafayette	17.0	17.0	*7.0	†10.0
Lake Charles	17.5	17.5	*7.0	†10.0
Shreveport	15.5	15.5	6.0	†10.0
Knoxville, Tenn.	19.5	19 5	8 0	11.5
Memphis	15.0	15.0	8.0	9.0
Chattanooga	19.5	19.5	8.0	11.5
Nashville	19.5	19.5	8.0	11.0
Bristol	19.0	19.0	8.0	12.0
Lt. Rock, Ark.	17.5	17.5	7.0	9.0

*Includes city tax of 1 cent. †Louisiana kerosene prices include 1-cent state tax. New Orleans kerosene price also includes 1-cent city tax.

Two-cent discount off kerosene tank wagon price and 2½ cents off gasoline tank wagon price to dealer and commercial accounts.

Ohio

STANDARD OIL CO. (OHIO)*

	Gasoline Tank wagon	Service station	Incl'ds tax of	Kero. tank wagon
Ohio points	17.5	18.0	5.0	*12.0

*Two cents off on gasoline tank wagon to dealers and commercial accounts; 2½ cents off tank wagon on kerosene to dealers.

Nebraska

STANDARD OIL CO. (NEBRASKA)

	Gasoline Tank wagon	Service station	Incl'ds tax of	Kero. tank wagon
Omaha	16.9	17.9	5.0	10.25
McCook	19.0	19.0	5.0	11.75
Norfolk	18.75	18.75	5.0	10.75
N. Platte	19.0	19.0	5.0	11.5
Scottsbluff	19.0	19.0	5.0	11.25

Note—Dealers' discount allowed as follows: Red Crown Ethyl, 3 cents off station price; Red Crown, 2½ cents off normal service station price; Nebraska Blue (third grade), 1 cent off normal service station price.

New York and Part of New England District

STANDARD OIL CO. (NEW YORK)

	Gasoline Tank wagon	Service station	Incl'ds tax of	Kero. tank wagon
Albany, N. Y.	14.5	15.5	4.0	9.0
New York	15.0	15.0	4.0	9.5
Buffalo	15.5	16.5	4.0	9.0
Rochester	15.5	16.5	4.0	9.0
Syracuse	15.5	16.5	4.0	9.5
Boston, Mass.	14.0	15.0	4.0	8.0
Augusta, Me.	17.0	18.0	4.0	9.0
Manch'tr, N. H.	17.0	18.0	5.0	8.0
Burlington, Vt.	16.5	17.5	5.0	8.5

Atlantic Coast District

STANDARD OIL CO. (NEW JERSEY)

	Gasoline Tank wagon	Service station	Incl'ds tax of	Kero. tank wagon
Atl'tic City, N. J.	15.7	16.7	4.0	11.2
Newark	15.0	16.0	4.0	8.5
Annapolis, Md.	16 3	17.3	5.0	10.0
Baltimore	15.7	16.7	5 0	8.0
Cumberland	17 2	18 2	5.0	11.7
Wash'g'n, D. C.	14.2	15.2	3.0	10.0
Danville, Va.	18 4	19 4	6.0	11.9
Norfolk	16.8	17.8	6.0	10.3
Petersburg	17.9	18.9	6.0	11.4
Richmond	17.2	18.2	6.0	10.7
Roanoke	18.4	19 4	6 0	11.9
Charles'n, W.Va.	17.1	18.1	5.0	11.6
Parkersburg	15.7	15.7	5.0	10.2
Wheeling	16.7	16 7	5.0	11.2
Charlotte, N. C.	20 0	21.0	7.0	12.5
Hickory	20.2	21.2	7.0	12.7
Mt. Airy	20.3	21.3	7.0	12.8
Raleigh	19 8	20 8	7.0	12.3
Salisbury	20.1	20 1	7.0	12.6
Charleston, S.C.	17.8	18.8	7.0	10.3
Columbia	19.7	20.7	7.0	12.2
Spartanburg	20.0	21.0	7.0	12.5

Two cents per gallon discount off tank wagon price of gasoline to dealers except Washington, D. C., and Baltimore, Md., where discount is 3 cents. Kerosene 1 cent off tank wagon for 25 gallons or more under contract except New Jersey.

Naphtha

	Tank Wagon	Car
Oleum spirits	10.7	6.23
V.M.P. naphtha	12.7	7.23
Cleaners' naphtha	15.2	9.23
Stanisol	15.2	9.23

Tank wagon prices f.o.b. Chicago January 6, 1932. Each of above prices subject to discount of 1 cent per gallon for 150-gallon lots if covered by contracts.

Pacific Coast Territory

STANDARD OIL CO. OF CALIFORNIA*

	Gasoline Tank truck†	Posted retail	Incl'ds tax of	Kero. tank wagon
Fresno	19.5	18.5	4.0	17.0
San Francisco	19.0	18.0	4.0	15.5
Los Angeles	18.5	17.5	4.0	15.5
Reno, Nev.	23.0	22.0	5.0	19.0
Portland, Ore.	20.0	19.0	5.0	16.5
Seattle, Wash.	22.0	21.0	5.0	16.5
Tacoma	22.0	21.0	5.0	16.5
Spokane	25.5	24.5	5.0	20.5
Phoenix, Ariz.	19.5	21.5	5.0	20.5

*Retail prices posted by Standard Stations, Inc., a subsidiary.

†Above prices are at company's plant or depots as company does not operate stations. A 4-cent per gallon discount is given dealers and customers taking tank wagon lots except in Phoenix where the discount is 1 cent.

Pennsylvania-Delaware and Part of New England

ATLANTIC REFINING CO.

	Gasoline Tank wagon	Service station	Incl'ds tax of	Kero. tank wagon
Pittsburgh, Pa.	16 5	17 5	4.0	10.0
Philadelphia	16 0	17.0	4 0	10 0
Scranton	16.5	17.5	4.0	10 0
Allentown	16 5	17 5	4.0	10.0
Altoona	16 5	17 5	4 0	10 0
Erie	16 5	17.5	4 0	10 0
Dover, Del.	16.5	17.5	4.0	10.0
Wilmington	16 5	17 5	4 0	10.0
Springf'd, Mass.	16 0	17 0	4.0	8 0
Worcester	16.0	17.0	4.0	8.0
Boston	15 0	16 0	4 0	8 0
Providence, R.I.	14.0	15 0	2 0	8 0
Hartford, Conn.	15.0	16 0	2 0	8.0
New Haven	15.0	16.0	3.0	8.0

Discount schedule effective November 1, 1932. In Delaware and Pennsylvania, 2 cents off station price on purchases of 2,000 gallons or more per month, in remainder of territory 1 cent. Wholesale discount 2½ cents per gallon on monthly deliveries of 20,000 to 100,000 gallons, 3 cents on 100,000 to 300,000 and 3½ cents on more than 300,000 gallons.

TANK WAGON CHANGES

Continental Oil Co. advanced the gasoline tank wagon and station prices 1 cent in Helena, Mont. On October 22 the kerosene price was advanced 4 cents in Albuquerque, N. Mex. On October 27 the gasoline tank wagon and station prices

(Continued on Page 32)

CRUDE OIL PRICE CHANGES

The Kanotex Refining Co. of Arkansas City, Kans., posted prices effective October 28 in Kansas starting at below 29 degrees, 76 cents; 29-29.9 degrees, 78 cents; and adding 2 cents for each degree upward to 40 degrees and over at $1.12.

(Continued on Page 32)

Crude Oil Prices

(Continued from Preceding Page)

North Louisiana and Arkansas

Smackover, Ark. (all grades)	See note below
Urania, La. (Oct. 15, 1932)	$ .70
East El Dorado, Ark. (Oct. 15, 1932)	.74
Stephens, Ark., below 29° (Apr. 12, 1932)	.61
Stephens, Ark., 29° and above (Apr. 12, 1932)	.64
Other fields	See gravity table

Note—Smackover, all grades, effective October 15, 1932, The Texas Company, Magnolia Petroleum Co., Louisiana Oil & Refining Co., Gulf Refining Co. of Louisiana, 75 cents; effective April 11, 1932, Standard Oil Co. of Louisiana, 60 cents. Urania posted by H. L. Hunt, Inc., and Louisiana Oil & Refining Co. East El Dorado posted by Magnolia Petroleum Co. and Gulf Refining Co. Stephens, Ark., posted by Louisiana Oil & Refining Co. and Atlantic Oil Producing Co.

South Central and Southwest Texas

Darst Creek	See note below
Luling (Oct. 15, 1932)*	$ .74
Mirando (Apr. 1, 1932)*	.90
Pettus (Apr. 11, 1932)†	1.00
Salt Flat	See note below
Thrall‡	
Lytton Springs (Lockhart) (Oct. 15, 1932)*	1.04
Dobrowolski§	
Same as Mid-Continent gravity scale up to and including 38-38.9°	
Somerset‖	
Same as Mid-Continent gravity scale up to and including 38-38.9°	

Note—Darst Creek, effective October 15, 1932, Magnolia Petroleum Co., The Texas Company and Gulf Pipe Line Co., 85 cents; effective April 11, 1932, Humble Oil & Refining Co., 75 cents. Salt Flat, effective October 15, 1932, Magnolia Petroleum Co. and Shell Petroleum Corp., 85 cents; effective April 11, 1932, Humble Oil & Refining Co. 75 cents. Humble Oil & Refining Co. posted 80 cents for Mirando crude oil on April 11, 1932.

*Posted by Magnolia Petroleum Co.
†Humble Oil & Refining Co.
‡Thrall prices same as North Central Texas, less 19½ cents per cwt. freight.
§Pioneer Oil & Refining Co.
‖Greyburg Oil & Refining Co.

Middle Western States

OHIO OIL CO.
(Effective April 11, 1932)

Lima	$1.15
Wooster	1.25
Illinois	1.10
Indiana	.75
Princeton	1.10
Plymouth	Shut in
Western Kentucky	1.05
Midland, Mich. (July 13, 1932)*	.85
Muskegon (July 14, 1932)†	Mid-Continent gravity scale
Muskegon (June 30, 1932)‡	.95
Somerset, Ky. (Apr. 25, 1932)	.85
Hart County, Ky. (June 10, 1932)§	1.00

*Posted by Pure Oil Co. Old Dutch Refining Co. pays 20 cents per barrel over Pure Oil Co.'s posted price. †Naph-Sol Refining Co. ‡Old Dutch Refining Co. §Posted by Stoll Refining Co. Somerset, Ky., crude purchased by Ashland Refining Co., Ashland, Ky., and delivered through own pipe line.

Mexico

Panuco*	$0.42

*F.o.b. ship, based on September transactions and exclusive of production and export taxes and bar dues.

Canada

Ontario (Nov. 3, 1931):	
Petrolia*	$1.90
Oil Springs*	1.97
Alberta (Apr. 22, 1932):	
Turner Valley†:	
Crude oil 40-44.9	1.56
Crude oil 45-45.9	2.18
Crude oil 50 and above	2.50
Crude naphtha	3.32
Discolored naphtha	3.05

*Imperial Oil, Ltd. †Imperial Oil, Ltd., and Regal Oil & Refining Co.

NEWS FOR SALES DEPARTMENTS

August Motor Fuel Consumption Shows 10 Per Cent Decline

Gasoline consumption decreased 9.73 per cent in August of this year compared to that of a year ago, according to tax reports made available to the American Petroleum Institute. The consumption of motor fuel in the United States decreased but 6.57 per cent in the first eight months of this year compared to the same period a year ago. The detailed reports by states is included below.

GASOLINE CONSUMPTION BY STATES, AUGUST, 1932

	Gallons	
	August, 1932	August, 1931
Alabama	12,007,000	14,608,000
Arizona	5,681,000	6,157,000
Arkansas	10,247,000	11,369,000
California	114,767,000	119,557,000
Colorado	16,244,000	18,448,000
Connecticut	24,534,000	25,879,000
Delaware	3,309,000	3,859,000
Dist. of Columbia	9,029,000	8,390,000
Florida	15,170,000	15,780,000
Georgia	17,643,000	21,037,000
Idaho	6,080,000	6,892,000
Illinois	91,773,000	102,187,000
Indiana	42,794,000	48,492,000
Kansas	36,208,000	*51,707,000
Kentucky	16,025,000	17,321,000
Louisiana	14,249,000	17,291,000
Maine	14,492,000	15,874,000
Maryland	18,676,000	18,125,000
Massachusetts	58,320,000	61,009,000
Michigan	77,087,000	87,710,000
Minnesota	45,037,000	49,809,000
Mississippi	9,600,000	11,584,000
Missouri	42,442,000	48,488,000
Montana	8,482,000	8,447,000
Nebraska	18,455,000	24,787,000
Nevada	2,536,000	2,626,000
New Hampshire	8,453,000	9,089,000
New Jersey	67,728,000	67,146,000
New Mexico	4,572,000	5,285,000
New York	159,351,000	169,019,000
North Carolina	19,407,000	21,228,000
North Dakota	14,802,000	14,650,000
Ohio	83,583,000	98,874,000
Oklahoma	24,806,000	28,881,000
Oregon	15,239,000	17,716,000
Pennsylvania	98,707,000	104,435,000
Rhode Island	10,550,000	10,674,000
South Carolina	9,491,000	11,169,000
South Dakota	12,997,000	12,674,000
Tennessee	16,024,000	20,111,000
Texas	66,700,000	80,555,000
Utah	5,544,000	5,906,000
Vermont	6,111,000	6,519,000
Virginia	22,001,000	24,245,000
Washington	24,954,000	24,447,000
West Virginia	12,967,000	14,979,000
Wisconsin	43,165,000	50,145,000
Wyoming	4,263,000	4,764,000
Total	1,462,242,000	1,619,944,000
Daily average	47,169,000	52,256,000
Change from previous year:		
Total decrease	157,702,000	.....
Percentage decrease in daily average	—9.73%	.....

*Revised. †Estimated.

VIRGINIA LETS CONTRACT

RICHMOND, Va., Oct. 31.—After the highway commission had rejected all bids taken September 20 to furnish 2,536,000 gallons of gasoline, new bids opened October 4 showed a saving to the State of about $25,000 over the old bids. Of the total of $316,516, Standard Oil Co. of New Jersey secured contracts for supplying 97 of the 100 counties at $311,000. The remaining contracts were awarded Sinclair and American Oil Co.

HITCH IN OIL DEAL

NEW YORK, Oct. 31.—The three-cornered deal whereby Russian crude oil is being shipped into Canada for refining in exchange for Canadian aluminum products has struck a snag, according to reports from Montreal this week.

Joseph Elie, director of the LaSalle Petroleum Refinery Co., operating the new refinery at Montreal East which has been processing the Russian oil, has announced that his company will not be prepared to accept further shipments of Russian oil.

Pure and Sun to Operate Gasoline Pipe Line Connecting Toledo and Detroit

The Pure Oil Co. and the Sun Oil Co. will participate in the ownership and operation of a gasoline pipe line extending from Toledo, Ohio, to Detroit, Mich., a distance of 60 miles, according to reports from the latter city. The line is to be 6-inch and will cost $500,000.

The line will extend from the Toledo refineries of the Pure and Sun companies to Hamtramck, a Detroit suburb. The Pure refinery at Toledo has a capacity of 9,000 bbls. daily and that of the Sun company 12,000 bbls. daily. Both these companies have large distribution in Detroit and vicinity and the gasoline line will provide cheaper transportation than is now available by rail. According to reports from Detroit, the permit to build the line has been taken out in the name of the Detroit Southern Pipe Line Co. It will require two months to build the line after materials arrive. All the right-of-way for the line has not been purchased.

The Sun company through the Susquehana Pipe Line Co. is the owner and operator of one of the largest gasoline pipe line systems. The line extends from its Marcus Hook, Pa., refinery to Pennsylvania, Ohio and New York points. The Pure company also uses this in shipments to New York State from its Marcus Hook refinery. The Pure company is one of the owners of the Great Lakes Pipe Line Co. which operates a gasoline pipe line system connecting Mid-Continent refineries to Middle West points.

Rumanian Gasoline Price Advanced in World Market

NEW YORK, Oct. 31.—Rumanian exporters have sharply advanced their export quotations on gasoline and several other refined products, according to mail advices from Constanza.

Motor gasoline, 730 gravity, has been advanced to $18.18 per ton, a jump of $1.22 per ton over previous quotations, bringing this grade to 4.9 cents per gallon, only slightly under the current posted price at the U. S. Gulf. For heavy gasoline, Rumanian exporters are now posting $13.02 per ton, an increase of 48 cents over previous quotations, and bringing this grade up to 3.7 cents per gallon, as compared with the current posted price of 4½ cents per gallon for U. S. Motor at the Gulf.

White spirit prices have also been advanced at Constanza to $11.58 per ton for first grade, an advance of 49 cents per ton, and $11.47 for the second grade, an increase of $2.40 per ton, and substantially narrowing the previous price differential between the two grades.

Lamp oil has been marked up to $7.14 per ton, an increase of 22 cents per ton. Gas oil is unchanged at last reports at $6.92 per ton, with fuel oil unchanged at $3.24 per ton.

The jump in export schedules at Constanza, it is believed, marks the placing into effect of the agreement recently entered into between Rumanian oil interests and the American-European group of companies at Paris, whereby certain European markets are cartelized, with definite proportions of these markets allotted to Rumania in return for co-operation by the latter country in price stabilization in such markets. The plan contemplates the establishment of export prices at Constanza based on prevailing U. S. Gulf open market quotations.

ASSOCIATED DIVIDES WORK

Consistently following a plan, inaugurated over two years ago, of alleviating unemployment by maintaining the maximum number of employes on its payroll, Associated Oil Co. announced yesterday the adoption of a program, effective November 1, contemplating five days as the maximum working week for any employe of the company. The program will provide employment to several hundred additional workers.

This decision, officials of the company state, is designed to meet a current emergency, and is not to be construed as defining a permanent company policy.

Misuse in Privilege of Tax Rebates to Farmers

The extremes of misuse to which gasoline tax exemption privileges can be put are recounted in a recent issue of the "Kansas Farmer." It declares that during June, 1931, farmers' exemptions were granted on 20 per cent of all the gasoline consumed, while in June, 1932, the exemptions amounted to 35 per cent. In Thomas County during June, 1932, gasoline tax collections amounted to $5,407.83. The exemption claim total was $10,756.08. June collections in Stanton County amounted to $3,642.42, while exemption claims totaled $8,626.92. It is explained that little tractor work was done in either county during June, yet from these figures it is indicated that each of the 565 farm tractors in Thomas County consumed 635 gallons of gasoline, while the 186 tractors in Stanton County each consumed 1,546 gallons. This makes no allowance for the kerosene and distillates that farmers used for fuel. The publication explains that this misuse of refund privileges represents the work of the racketeer rather than the farmer. Somewhere along the line of the farmer's claim for exemptions on a small amount of gasoline is said to be altered and the amount increased by thousands of gallons merely by adding a few cyphers to the gallonage figures. "Where this crookedness has been uncovered," says the magazine, "it has been found that it is the small oil jobber who runs a few filling stations along with his tank trucks who is guilty. The well-known companies are not participating in this business. The State is putting some of the offenders in jail, but it is plain that the abuse of the law is out of bounds and the fraud is increasing."

OIL EXHIBIT IN PAINT SHOW

NEW YORK, Oct. 31.—Anderson-Prichard Oil Corp., industrial naphtha refiners, will present an unusual exhibit and its operations at the Paint Industry Show to be held in Washington November 11, 12 and 13.

The company's exhibit will show photographs and maps of oil fields and will feature a motion picture, especially prepared, showing development work in the Oklahoma City Field, including the bringing in of gusher wells, burning oil and gas wells, etc.

C. H. Dresser, director in charge of industrial naphtha sales, will be in charge of the company's exhibit, assisted by Dr. J. K. Stewart.

Standard Oil New Jersey Organizes Army of Salesmen

NEW YORK, Nov. 1.—Effective today, 18,000 employes of the Standard Oil Co. of New Jersey and the Standard Oil Co. of Pennsylvania, a subsidiary, take the field in teams of 12 in a company wide sales competition in all divisions of the marketing areas of the two companies.

The sales drive has been thoroughly organized in refineries, branch sales offices, and general offices. The plan of organization involves the formation of teams of 12, under the leadership of a captain, who is a member of the team. Ten teams compose a division, under the direction of a "major," with the divisions composing sales units made up of respective units of the company, such as the Bayonne refinery, district sales offices etc. These units in turn are under the command of a local operating committee and a senior "major," generally a branch or department head.

A directing staff of the sales army is composed of a central operating committee made up of J. A. Donan of the sales department, chairman; H. C. Welti of the manufacturing department, S. B. Cochran of the lubricating division, D. F. Davis of the personnel and training department, and Mortimer Louis of the general division of the sales department.

The central operating committee, in turn, is under the direction of an executive committee including C. G. Black, president of the Standard Oil Co. of New Jersey, chairman; J. H. Senior, president of the Standard Oil Co. of Pennsylvania; G. W. McKnight, C. G. Sheffield and Richardson Pratt, vice presidents of the Standard Oil Co. of New Jersey, and E. A. Holbein, vice president of the Standard Oil Co. of Pennsylvania.

The employe sales drive by the New Jersey company is along the same general lines as similar sales campaigns now being operated by other major eastern oil companies.

CANADIAN DUTIES REMOVED

CHATHAM, Ontario, Oct. 29.—All dumping duties, special duties and arbitrary valuations on gasoline entering Canada were withdrawn by the Canadian government on October 20. The decision was embodied in an order in council passed on that date.

The only duty left on imported gasoline is now the tariff of 2 cents a gallon imposed by the present government in its 1930 budget.

Removal of the special duties is regarded at Ottawa as a direct result of the enquiry held by parliament at the last session regarding gasoline prices in Canada. At that time, oil companies stated that higher gasoline prices in Canada were due to dumping duties. However, the effect of the new move upon gasoline prices in Canada has not yet been made manifest, though an early drop in gasoline prices is predicted.

LION GETS FUEL CONTRACT

NEW YORK, Oct. 31.—Lion Oil Refining Co. of El Dorado, Ark., has been awarded a contract to supply 840,000 gallons of fuel oil to the U. S. Engineer at Memphis, at 38 cents per barrel, f.o.b. refinery.

Gulf Refining Co. has received an order for 500,000 gallons of Bunker "C" fuel oil delivered at Providence, R. I., at 75 cents per barrel.

Standard Oil Co. of Louisiana has been awarded a contract to supply the U. S. Engineer at New Orleans with 5,053 bbls. of Diesel fuel oil at $1.50 per barrel.

NATURAL GASOLINE MANUFACTURE

California Stocks of Gasoline Less During September

California natural gasoline production increased slightly in September but the increase was not sufficient to equal the larger demand and stocks were drawn upon again. Intercoastal shipments increased materially and accounted for a large share of the total increased demand. The production and sale of liquefied petroleum gases showed an increase, reflecting the seasonal improvement in consumption.

The following data were prepared by the California division of the Bureau of Mines:

CALIFORNIA NATURAL GASOLINE STATISTICS, AUGUST AND SEPTEMBER

	Crude petroleum August	Natural gasoline Sept.
Supply		
Total production	34,133	33,997
Stock trans. (deliv.) receipt—net	(777)	(1,389)
Total	33,356	32,608
Deduct refinery requirements:		
Run to stills	3,693	2,685
Blended	20,030	26,008
Total	23,723	28,693
Gains (losses) unaccounted for—net	(3,608)	(4,126)
Net supply available to market	6,025	(211)
Demand		
Domestic consumption inc. bunkers	372	378
Off shore shipments:		
Alaska and Hawaii	1,590	
Pacific foreign exports	4,103	392
Intercoastal shipments		2,404
Rail and truck shipments to U. S. points outside Pac. Coast terr.		8
Total market demand	6,065	3,182
Surplus or (deficit)	(40)	(3,393)
Stocks—Last Day of Period		
Total stocks	2,872,055	2,770,254
Inside Pac. Coast terr.:		
At refineries	2,378,225	2,264,946
Elsewhere	493,830	505,308
Inside Pac. Coast terr.—last day	2,872,055	2,770,254
Inside Pac. Coast terr.—first day	2,873,302	2,872,055
Increase or (decrease) during period	(1,247)	(101,801)

OPERATING DATA

Number of plants operating	105
Daily capacity in thous. cu. ft.	2,520,257

PRODUCTION BY FIELDS

	Gas treated (thousand cu. ft.)	Natural gasoline produced (gallons)
Fullerton and Whittier	522,256	1,304,971
Midway	1,755,449	3,997,071
Huntington Beach	422,153	1,369,736
Kettleman Hills	7,225,078	10,212,472
Long Beach	3,241,154	8,035,606
Richfield	372,686	457,259
Santa Fe Springs	5,127,151	7,769,163
Seal Beach	515,000	910,070
Ventura Avenue	2,917,651	2,973,330
All other fields	3,862,801	6,300,611
Total	26,061,379	42,330,288

PRODUCTION BY METHODS

Type of plant—	Gas treated M.C.F.	Natural gasoline produced (gals.)	Gasoline recovery per M.C.F. gas treated
Oil absorption	25,887,068	42,134,346	1.628
Compressor	174,311	195,942	1.124
Total	26,061,379	42,330,288	1.624

Finished gasoline produced at plants (bbls.) 187

STOCKS

	Gallons	Barrels
Natural gasoline held by plant operators	2,267,907	53,998
Natural gasoline held by refineries	114,082,752	2,716,256
Total	116,350,659	2,770,254

LIQUEFIED PETROLEUM GASES (Barrels—daily average)

	September	August
Production	401	365
Sales	378	372

Refiners Use Only 70 Per Cent as Much Natural First 8 Months of This Year

In the first eight months of this year the lesser use of natural gasoline on the part of refiners in the United States accounts for 6,895,000 bbls. of the 21,768,000-bbl. decline in the total refinery gasoline output during that period. The curtailed refinery operations generally observed throughout the country during this period accounts for the large drop of 13,487,000 bbls. in the production of straightrun gasoline and this in turn naturally effected a lesser need for natural gasoline.

Comparing the use of natural gasoline and the production of cracked and straightrun gasoline for the first eight months of this year with those for the same period in 1931 the lesser use of natural gasoline shows up much more forcefully. In the first eight months of 1932 the decline approximated 29.3 per cent compared to a year ago while the decline in the output of straightrun gasoline approximated only 9 per cent. The decline in the production of cracked gasoline approximated only 1.4 per cent, which may be assumed as having a major influence on refiners not using a normal quantity of natural gasoline.

This would also lead to the conclusion that changes in the total production of motor fuel have a very pronounced effect on the volume of natural gasoline consumed. Under the present manner of operating refineries, the cracking plant is separated from the skimming plant and the two operate rather independently.

Cracked gasoline has been favored in the motor fuel markets in the past year because of its generally higher antiknock value and has commanded a premium in price. Also, the intensive cracking of the normal charging stocks encourage a relatively large yield of light vapors which may be condensed to make a suitable substitute for natural gasoline. So, during the past eight months of relatively low motor fuel consumption the tendency was to continue to operate the cracking plants as near their normal capacity as was possible to supply charging stock and the volume of crude run was cut to a minimum. This has been favored also because of the poor prices for fuel oil and in many refineries conditions have developed where practically all of the fuel oil normally produced must now be cracked to economically dispose of it.

However, when the consumption of motor fuel begins to increase, there will likely be a reversal of the trend because the same relationship with respect to the production of cracked gasoline, straightrun gasoline and the use of natural gasoline has not been seriously affected in the past year. In other words, at such a time as the total gasoline consumption increases it may be expected that the shipments of natural gasoline to refiners will be greatly increased. This increase in the use of natural gasoline may also be expected to be considerably more than the greater demand for all motor fuels will indicate.

This assumption is predicated on the theory that refiners will not greatly add to the present cracking capacity of their plants. This has been the case over the past year although factors have operated which have distinctly favored increasing this portion of their operations. There have been numerous cracking plant installations but it is doubtful that these have equalized the cracking equipment shut down and it may be fairly safely stated that the cracking capacity added over the past year has fallen short of the capacity lost as a result of corrosion, wear and obsolescence. There has been some boosting of cracking capacity as the result of adding heating surface to the furnaces, adding heat exchangers and improved control but this added to the new plants still probably falls short of the natural decline.

Among the various refining centers taking large quantities of natural gasoline, the Rocky Mountain group is the only one to increase the proportion of natural gasoline in the finished blend during the first eight months of this year compared to the same period a year ago. Oklahoma and Kansas refiners used the same proportion but all of these groups showed substantial reductions. On a percentage basis, the East Coast refiners showed the largest reduction. Whereas 2.1 per cent of their output was natural gasoline a year ago only .8 per cent of it was natural gasoline for the eight months this year.

California shows the largest decline in the actual volume of natural gasoline used, the reduction for the period being approximately 1,500,000 bbls. and the percentage of natural gasoline in the total blend declined from 16.2 per cent a year ago to 13.4 per cent this year. In reviewing similar data applying to the United States, it is seen that an actual reduction of nearly 5,000,000 bbls. is shown for the consumption of natural gasoline at refineries. It is also shown that the percentage of natural gasoline in the finished motor fuel shipped from refineries has dropped from 8.3 to 6.8 per cent.

Since there is an increasing volume of natural gasoline moving direct from the gasoline plant to jobbers and refiners operating blending plants at consuming centers, the loss in the quantity to refineries is being partially equalized. It has been indicated that the quantity thus moving is 30 per cent higher for the first eight months of this year than during that period in 1931, but the statistics have been incomplete.

The following table offers a more detailed study of the trends of motor fuel production by areas within the two eight months' period discussed, all data being based upon reports issued by the Bureau of Mines.

TABLE 1—RELATIVE VOLUMES OF NATURAL GASOLINE, STRAIGHTRUN AND CRACKED GASOLINES BLENDED BY AREAS

FIRST EIGHT MONTHS OF 1932

	Straightrun Bbls.	%	Cracked Bbls.	%	Natural gasoline Bbls.	%	Total Bbls.
East Coast	20,864,000	45.6	24,452,000	53.6	379,000	.8	45,695,000
Appalachian	5,921,000	51.1	5,428,000	47.0	221,000	1.9	11,570,000
Ind., Ill., Ky., etc.	17,800,000	44.4	21,298,000	52.9	1,084,000	2.7	40,182,000
Okla., Kans.	18,626,000	53.9	13,095,000	37.6	2,946,000	8.5	34,667,000
Inland Texas	10,692,000	58.7	5,697,000	31.2	1,850,000	10.1	18,239,000
North La.-Ark.	2,737,000	50.0	2,242,000	40.6	576,000	10.4	5,555,000
Coastal Texas	21,289,000	46.6	22,072,000	48.5	2,220,000	4.9	45,581,000
Coastal La.	5,537,000	47.3	5,493,000	46.7	717,000	6.0	11,747,000
Rocky Mountain	2,473,000	44.5	2,471,000	44.5	622,000	11.0	5,566,000
California	27,260,000	61.2	11,313,000	25.4	6,016,000	13.4	44,589,000
Total United States	133,199,000	30.9	113,561,000	42.3	16,631,000	6.8	263,391,000

FIRST EIGHT MONTHS OF 1931

	Straightrun Bbls.	%	Cracked Bbls.	%	Natural gasoline Bbls.	%	Total Bbls.
East Coast	20,025,000	44.6	23,941,000	53.3	968,000	2.1	44,934,000
Appalachian	6,562,000	57.6	4,477,000	39.3	346,000	3.1	11,385,000
Ind., Ill., Ky., etc.	21,799,000	49.4	20,667,000	46.8	1,661,000	3.8	44,127,000
Okla., Kans.	23,120,000	55.8	14,767,000	35.7	3,525,000	8.5	41,412,000
Inland Texas	13,807,000	64.4	5,392,000	25.1	2,255,000	10.5	21,454,000
North La.-Ark.	2,843,000	49.1	2,204,000	38.1	739,000	12.8	5,786,000
Coastal Texas	20,866,000	42.1	24,262,000	48.9	4,464,000	9.0	49,592,000
Coastal La.	4,722,000	41.0	5,645,000	49.0	1,155,000	10.0	11,522,000
Rocky Mountain	3,706,000	45.7	3,573,000	44.1	826,000	10.2	8,105,000
California	29,236,000	62.4	10,019,000	21.4	7,587,000	16.2	46,842,000
Total United States	146,686,000	51.4	114,947,000	40.3	23,526,000	8.3	285,159,000

TABLE 2—PERCENTAGE OF GASOLINE BLENDED BASED ON CRUDE OIL REFINED

	Straightrun gasoline output	Cracked gasoline output	Total straightrun and cracked	Natural gasoline used	Total refinery gasoline output
1918	22.7	2.6	25.3	0.8	26.1
1919	22.5	2.8	25.3	0.8	26.1
1920	22.6	3.5	26.1	0.7	26.8
1921	22.6	4.5	27.1	0.6	27.7
1922	22.8	6.0	28.8	0.7	29.5
1923	24.0	6.0	30.0	1.0	31.0
1924	25.0	6.2	31.2	1.9	33.1
1925	23.1	9.3	32.4	2.7	35.1
1926	22.9	12.0	34.9	3.6	38.5
1927	23.8	12.2	36.0	3.9	39.9
1928	24.0	13.4	37.4	3.9	41.3
1929	24.8	14.5	39.3	4.7	44.0
1930	24.2	17.7	41.9	4.7	46.6
1931	24.6	19.7	44.3	3.9	48.2
First 8 months 1932	23.9	20.3	44.2	3.0	47.2

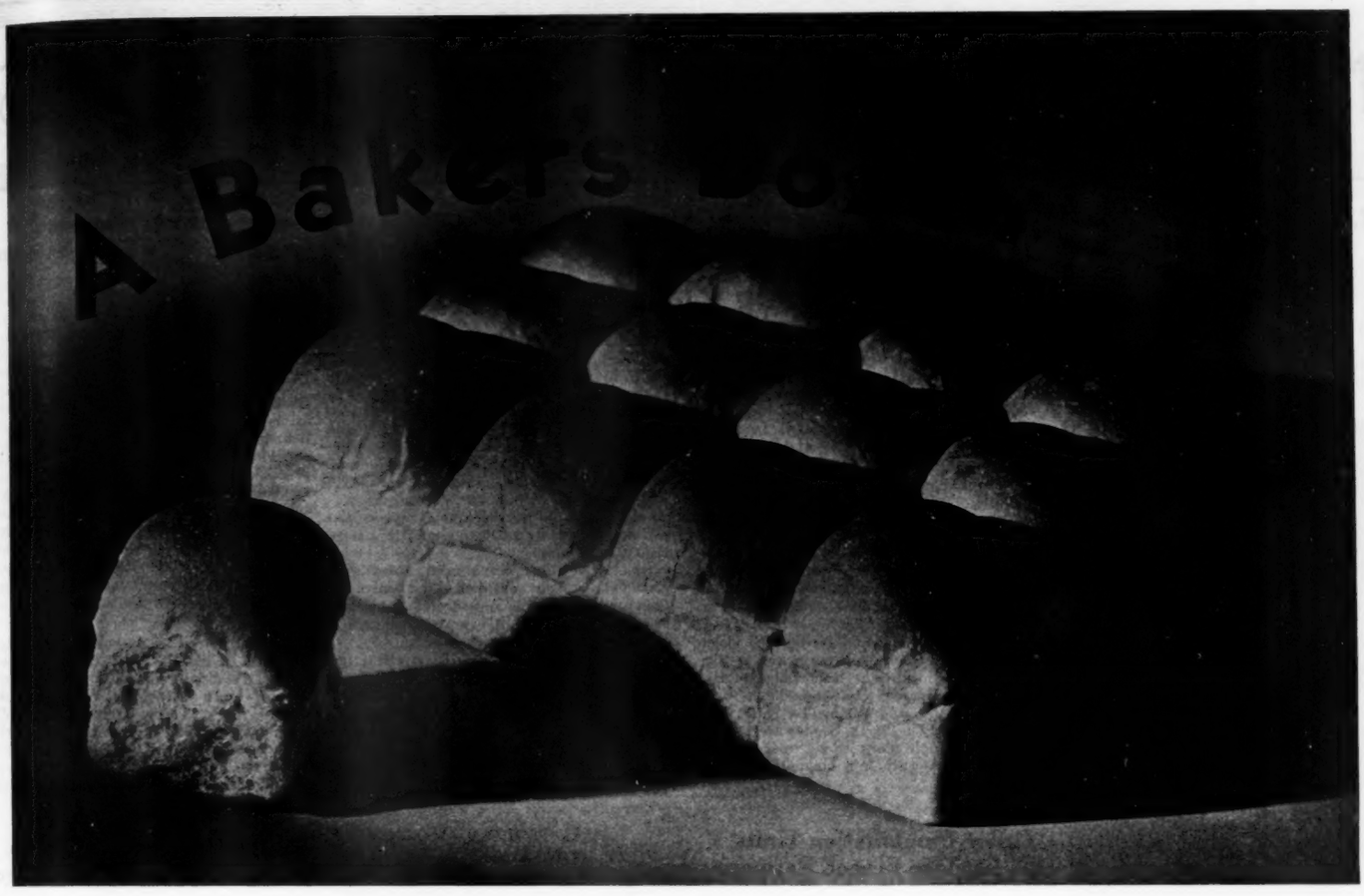
Natural Gasoline Plant Being Built in Montana

BUTTE, Mont., Nov. 1.—The Montana Power Co. has foundations in for a large gasoline absorption plant to be constructed 4 miles east of Cut Bank. It will recover gasoline from gas piped from the Cut Bank Field to Butte, Helena and other Montana cities. Contract was awarded to the Stearns-Rogers Manufacturing Co., of Denver. Louis Weiss, of Denver, is in charge for the contractors.

Despite the fact that Montana fields have produced considerable crude oil over a long period of time, there has not been a corresponding development in the matter of extracting the light vapors from the gas produced along with the oil. At the present time there are but few natural gasoline plants in the State and there are no large plants in operation.

JOINS MARKETING COMPANY

NEW YORK, Oct. 31.—Joseph B. Heaney, well known in Eastern marketing circles, has joined the recently organized firm of Lydecker & Hood, of 11 Broadway. Mr. Heaney was associated with Pierce Petroleum Corp. from 1919 to 1926, as assistant to the president, and came to New York in 1926 with the Oil Trading Co., handling cargo sales for the Pierce corporation.



Someone Pays For the Extra Bun!

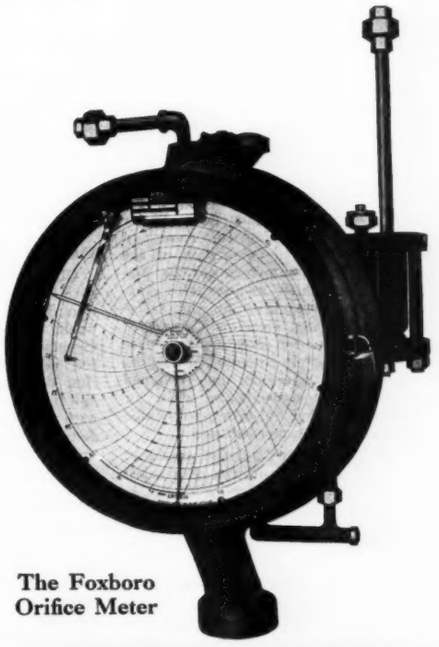
In gas measurement, someone pays for the gas that has slipped by a meter without being measured and that somebody is *you*.

The importance of reliable meters should not be underestimated. Enough gas may be lost in a month through inaccurate measurement to pay for a really accurate meter.

A meter needs more than initial accuracy to be reliable. It should stay accurate over long periods of time. Continuous accuracy is a matter of design and construction. Have you studied the design of the Foxboro Orifice Meter?

Because of its *effective* check floats and *STRAIGHT LINE* Motion the Foxboro Orifice Meter will maintain its extreme accuracy *longer than any other*. Records show this and we stand ready to prove it any time and anywhere.

If you buy or sell gas our new Bulletin "Orifice Meters for Gas" No. 176-J should be on your desk. Write for it today.



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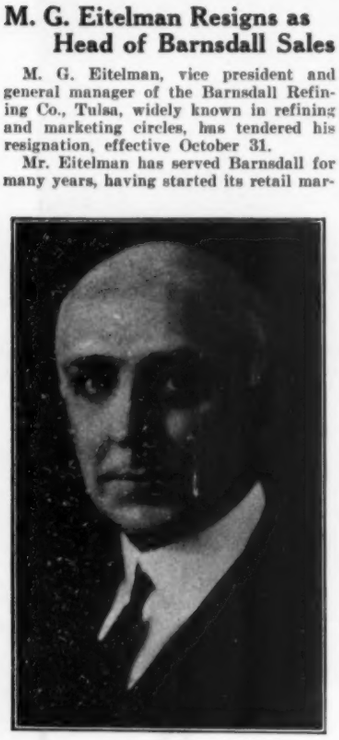
Instruments for Controlling, Recording and Indicating Temperature, Flow, Level and Pressure

NEWS FOR PETROLEUM REFINERS

M. G. Eitelman Resigns as Head of Barnsdall Sales

M. G. Eitelman, vice president and general manager of the Barnsdall Refining Co., Tulsa, widely known in refining and marketing circles, has tendered his resignation, effective October 31.

Mr. Eitelman has served Barnsdall for many years, having started its retail mar-



M. G. EITELMAN

keting division and carried it through to its present size and efficiency. Prior to his association with Barnsdall about 12 years ago, Mr. Eitelman was assistant general manager of the former Waters-Pierce Oil Co. and its successors for a great many years. That company, during his association with it, was the largest single distributing unit in the petroleum industry in the United States, with the exception of the Standard Oil Co.

In addition to his duties with Barnsdall, Mr. Eitelman has served for several years as a national committeeman of the Division of Marketing of the American Petroleum Institute, as chairman of the Oklahoma State Committee on the National Code of Ethics, as executive committeeman and treasurer of the Oklahoma Gasoline Tax Evasion Committee and as a director and secretary-treasurer of the Oklahoma Petroleum Marketers Association. Mr. Eitelman has resigned from all of these associations, also, for an indefinite period in order to enable him to take a much needed rest.

He will be succeeded as vice president and general manager of the Barnsdall Refining Co. in Tulsa by William A. Riley, former manager of the Missouri-Kansas division of Barnsdall at Kansas City, Mo.

DISCOUNT SCHEDULE ADOPTED

Atlantic Refining Co. has announced the inauguration of gasoline quantity discounts in its territory, effective November 1. In Delaware and Pennsylvania a discount of 2 cents per gallon will be allowed retail accounts on purchases of 2,000 gallons and over per month and in the remainder of the territory 1 cent per gallon on a similar minimum quantity. Wholesale discounts will be 2½ cents per gallon on 20,000 to 100,000 gallons monthly, 3 cents on 100,000 to 300,000 gallons, and 3½ cents on 300,000 gallons and up per month.

Sinclair Refining Co. to Spend $700,000 in Modernizing Plant at Fort Worth

FORT WORTH, Tex., Nov. 1.—The Sinclair Refining Co. will spend $700,000 in modernizing its local plant, and construction work will start within the next 30 days. The improvements include a cracking unit of a type used in all of the Sinclair refineries and auxiliary equipment will be built to balance the plant.

This construction work is part of a program authorized by the company in which $23,000,000 is to be spent. Much of this work has been completed, the major job now under construction being the erection of a combination skimming and cracking unit at the company's Kansas City, Kans., refinery.

Extensive additions have also been made within the past three years to Sinclair plants located at East Chicago, Ill., Coffeyville, Kans., Houston, Tex., Marcus Hook, Pa., and Wellsville, N. Y. The plant recently built at Gladewater, Tex., was the fourth plant to be operating in Texas by the Sinclair company. Tentative plans have been made for the modernizing of the Sand Springs, Okla., plant by the addition of a cracking unit there.

When properties of the Pierce Petroleum Corp. were acquired about two years ago, H. F. Sinclair, chairman of the executive committee of Consolidated Oil Corp., announced that the refinery, which had been idle for several years, would be rebuilt to meet modern specifications as rapidly as business in this territory warranted.

Sinclair's plans, announced Saturday, reflect increased confidence not only in the future growth and development of Fort Worth, but of the improved general oil situation in the Southwest.

Headquarters for Sinclair activities in the six southwestern States of Texas, Arkansas, Oklahoma, Louisiana, Mississippi and New Mexico was established in Fort Worth two years ago and have been maintained in the Sinclair Building at Fifth and Main Streets since that time.

Order Combination Units for Two French Refineries

NEW YORK, Oct. 31.—Compagnie de Construction de Raffineries, S.A.F., has closed contracts for the construction of two new combination primary cracking, vapor-phase cracking, and reforming units, with stabilizer and re-run stills, one to be built for Les Raffineries de la Vacuum Oil Compagnie, S.A.F., at Port Jerome, and for Compagnie Industrielle de Petroles, S.A.F., at Frontignan.

Both of the two new units will be operated under the Gasoline Products Co.-Soconoy-Vacuum Corp. license, according to European representatives of M. W. Kellogg Co., construction agents for Gasoline Products Co.

Each of the new units will have a charging capacity of approximately 2,700 bbls. of topped crude, kerosene and naphtha stocks daily.

IMPERIAL ADOPTS 5-DAY WEEK

CHATHAM, Ontario, Oct. 29.—Imperial Oil, Ltd., has announced the adoption in its Sarnia plant of the 5-day week, in place of the 5½-day week previously in force. Coincidently, wages are reduced one-eleventh; though this reduction does not affect salaries of $100 a month or less. The step taken is in line with a policy of bringing about a wider distribution of available employment and thereby relieving existing depressed conditions.

NEW CANADIAN REFINERY

CHATHAM, Ontario, Oct. 29.—L. R. Olson and associates of General Petroleums, Ltd., have commenced work on the construction of their new refinery at Edmonton, Alberta. The old refinery building on the South Edmonton site is being remodeled, and arrangements are being made to install new refining facilities and storage equipment.

ASSOCIATION APPOINTMENTS

The National Petroleum Association has made revisions in the work of its officers and Fayette B. Dow, general counsel, has announced the appointment of Willis Crane, formerly traffic attorney as his associate counsel and Harry S. Elkins has been made traffic attorney.

MAY BUILD PLANT

FORT WORTH, Tex., Nov. 1.—A 2,000-bbl. refinery has been proposed for Big Sandy, Upshur County, Texas, to cost in the neighborhood of $50,000, a 10-acre site already having been chosen for the plant according to reports from the field. Oil will be furnished the plant from the Gladewater area, western Gregg and Upshur Counties. A siding is to be constructed on the St. Louis, Southwestern Railroad tracks at Big Sandy.

Deep Rock to Install New Stabilizer and Absorber

The Deep Rock Oil Co. has completed plans for the construction of a new pressure distillate stabilizer and oil absorption plant at its Cushing, Okla., refinery. Contract for the design and equipment has been let to the Burrell-Mase Engineering Co., Tulsa. The unit will be installed by the Deep Rock company.

The new unit will provide stabilizing capacity to handle 2,500 bbls. of pressure distillate daily. The oil absorption plant will handle 2,500,000 feet of gas daily. The Deep Rock refinery has a crude oil capacity of 12,000 bbls. daily with Dubbs cracking equipment.

REFINER LOSES SUIT

AUSTIN, Tex., Oct. 29.—A verdict for $30,000 representing gasoline tax allegedly due was obtained by the State of Texas against the V. O. E. Refining Co. of Gladewater in Travis County District Court. The suit involved a tax on 750,000 gallons at 4 cents per gallon. The verdict was based on three special issues submitted to a jury.

IMPERIAL INVESTMENT TRUST

CHATHAM, Ontario, Oct. 29.—At the request of 93.03 per cent of eligible employes, Imperial Oil, Ltd., this summer inaugurated its fourth co-operative investment trust, to operate for three years from July 1, 1932. The three previous trusts were marked by increasing participation, with 47.98 per cent of employes in the first, 60.51 per cent in the second and 82.10 per cent in the third. As a result of these previous trusts, employes now hold 1,939,639 of the 26,817,825 no par shares of the company's stock.

Survey Shows Abundance of U. S. Filling Stations

Of the 150,000 gasoline service stations in the United States, 53,000 are chain stations operated by 955 companies or individuals, according to a preliminary survey just completed by the Petroleum Code Handbook, of 258 Fifth Avenue, New York. The survey embraces only gasoline filling stations where the sale of gas and oil is the primary business of the establishment, and excludes the roadside pumps at inns, lunch wagons, stores, parking places, etc., estimated to number about 100,000. Today there are more service stations than garages handling automobile accessories, and of the 68,000 so engaged the chain stations account for 78 per cent.

The survey, which lists the companies, main and district offices, number of stations, etc., by cities and states, shows as follows:

Two to 100 stations each, 904 companies, 10,116 stations; 100 to 500 stations each, 24 companies, 14,491 stations; 500 or more stations each, 27 companies, 28,516 stations. Total companies owning chain stations 955; total number of stations, 53,123. Of the 904 companies with under 100 stations each, 693 had from 2 to 6 stations each, representing a total of 2,893 stations.

No Tax Refund on Gasoline Lost or Destroyed by Fire

WASHINGTON, D. C., Oct. 29.—No refund of the tax on gasoline can be made by the Treasury Department where gasoline has been lost or destroyed, according to a decision just made public.

On this subject the Bureau of Internal Revenue says:

"Advice is requested whether a wholesaler who has suffered a loss of gasoline in an electrical storm which wrecked one of the storage tanks filled with gasoline purchased tax-paid from the refiner, may properly file a claim with the commissioner for the refund of tax reimbursed to the producer on the gasoline that was lost.

"The tax under Section 617 of the Revenue Act of 1932 is imposed upon, and accrues at the time of, the sale by the importer or by a producer of gasoline. The subsequent use or final disposition of such gasoline has no bearing on the tax. Therefore, no refund of tax may properly be made where gasoline has been lost through fires or other causes."—C. E. K.

Cargo Rumanian Kerosene Arrives in Wilmington

NEW YORK, Oct. 29.—The Norwegian motor tanker Stigstad arrived at Wilmington, Del., this week with a cargo of kerosene from Constanza, Rumania, consigned to the Shock Independent Oil Co. The Shock company, which has a marine terminal at Wilmington, is an independent marketing organization with headquarters in Mount Joy, Pa.

Details regarding the size of the cargo are not available here, but the carrying capacity of the Stigstad is approximately 70,000 bbls., and it is understood that the tanker brought a full cargo. Some reports indicate that gasoline formed part of the cargo, but confirmation of this report is lacking.

ANOTHER EAST TEXAS PLANT

Callaway Brothers are constructing a 400-bbl. refinery just west of the town of Kilgore on the Kilgore-Gladewater highway in Gregg County, and will process crude from wells in this area.

Canada Plant Operations Will Supply Requirements

(Continued from Page 9)

the United States. As previously explained, the fuel oil output has to have a low viscosity, and in this respect also the refinery with cracking facilities has an advantage over the skimming plant. Due to the emphasis placed on quality, Canada is a large buyer of natural gasoline from the United States, the purchases in 1931 totaling 32,140,805 Imperial gallons. Natural gasolines of more than 80 A.P.I. gravity, when imported by refiners of petroleum for blending with other gasolines distilled in Canada, are admitted duty free.

Much has been said both in Canada and United States about the supposedly high prices for motor fuels in Canada. Early this year an official investigation was conducted by the government and at the end the oil companies were given a clean bill of health. All the provinces have gasoline taxes which vary from 5 to 7 cents per gallon. In Ontario at present the retail price for the regular grade of gasoline at several points is 27 cents, which includes a 6-cent tax. This means a net price of 21 cents for the Imperial gallon, which is equivalent to 17.5 cents for the American gallon. At some points a third or competitive grade is sold 2 or more cents under the regular grade.

As explained by one refiner in the states, the difference in prices between the United States and Canada represents the difference between profit and loss. It was pointed out in the official investigation that prices in the United States do not, in most cases, represent profits for the marketing end and are relatively low due to excessive competition among distributors and gasoline tax evasion. Points in Canada long distant from sources have high gasoline prices due both to transportation costs and the low consumption.

Water Transportation

Water transportation plays a greater part in refining and marketing of petroleum products in Canada than it does in the United States. All the larger refineries are located along navigable waterways. The latter include rivers, canals and lakes. It is said that over 50 per cent of the petroleum products distributed in Canada are consumed within an area 50 miles from these waterways so that with adequate terminals it would be possible to market with combination water and truck transportation without the use of rails.

The St. Lawrence and Great Lakes waterway, including connecting canals, furnishes water transportation for the movement of crude oil and refinery products half way across Canada from the east. Water transportation is also largely used on the West Coast and in certain northern sections where consumption is small. The Great Lakes-St. Lawrence waterways closes in November and does not open until the next spring. This necessitates large crude oil storage programs at several refineries and some of the major distributors are also providing for large storage of refinery products at terminals to take care of requirements during the closed season.

Gasoline distribution is carried on in Canada in much the same manner as in the United States. The larger distributors have company-owned drive-in stations, these units in many cases having expensive and elaborate equipment. The larger companies also sell to jobbers. Dealers are important factors in retail distribution.

In addition to the three companies previously named, the following companies are large distributors in Canada: Shell Oil Co. of Canada, Sun Oil Co., Cities Service Oil Co. and Canadian Oil Cos., Ltd. All these companies are affiliated with parent companies in the United States, although the Canadian units are operated separately. The Canadian Oil Cos., Ltd., affiliated with the National Refining Co., is the only one of the four that has a refinery in Canada at present, although the Shell company has two building.

An article appearing in the September 1, 1932, issue of The Oil and Gas Journal, page 27, gave a summary of the Canadian taxes on crude oil and refinery products. Crude oil up to 47.6 A.P.I. gravity is duty free and the general duty on motor fuels is 2½ cents a gallon. Importers from countries of the British Empire have preferential rates in certain cases, including 2-cent rate on motor fuel.

An interesting situation in regard to these import duties has developed in recent weeks. Through a barter arrangement, aluminum manufactured in Canada is being traded for Russian oil and brought to Canada, where it is refined at a new skimming plant located at Montreal. Under the Canadian law, this oil, if it was crude oil, was not taxable. Under another provision, if it was crude oil not in a natural state, it was subject to duty of one-half cent.

In this case it was claimed that the oil was a blend of 75 per cent finished gasoline, fuel oil and crude oil. It has been contended that this oil not only should not be allowed to enter duty free but also that it was not entitled to be classed as crude oil not in its natural state. It was claimed that the 75 per cent gasoline should be taxed the full 2½-cent rate applicable to motor fuels and the remainder pay whatever tax applied to those grades of oils. At this writing no official announcement had been made in settlement of the controversy but it is apparent that the final decision will have important bearing on Canadian operations.

Refinery Operations

The Canadian refineries, by provinces, including location, crude oil capacity and cracking capacity, are shown in the accompanying table. In equipment and methods of operations they do not differ from representative plants in the United States. Many of the operators formerly lived in the states and much of the equipment came from U. S. manufacturers.

In new construction, however, Canadian equipment and materials are being largely used, including engineering design. This is due to the tariffs and the aid given by the government to local industries. A thorough knowledge of this situation is necessary to anyone contemplating construction work in Canada. The story is told of one company which designed a small plant in the United States recently and while construction work was under way in Canada was forced to pay 2 per cent duty on the entire cost of the plant to cover the duty on the engineering blue prints.

Crude Oil Supplies

Canadian refiners secure the bulk of their crude oil supplies from fields in the United States and South America. The Canadian production is sufficient to supply only a small fraction of the total requirements. The Sarnia refinery of the Imperial Oil Refineries, Ltd., which is the oldest and largest in the Dominion, is supplied crude oil from the Mid-Continent through a pipe line connection south to Ohio. Other Mid-Continent crude oil is moved south by pipe line to the Gulf Coast and moved by boat to refineries located at Montreal, Toronto and other points. In the central part of Canada some crude oil is purchased from Mid-Continent and Rocky Mountain fields and shipped by tank car. The West Coast refineries secure crude oil from California and South American fields. The latter are large sources of supply for refineries in eastern Canada.

Shell Construction

With the completion of two new refineries now under construction, the Shell Oil Co. of Canada will become one of the four largest refiners in Canada. The eastern plant located at Montreal will serve its eastern distribution and the Vancouver refinery the western sections. Both plants should be completed early next year.

YATES POOL LITIGATION

AUSTIN, Tex., Oct. 31.—The Third Civil Appeals Court Monday certified to the Supreme Court the California Co. and Whiteside (Douglas Oil Co.) appeal cases, involving title to part of the Yates oil pool of Pecos County. Attorney General James V. Allred, urging expedition of the Whiteside case, told the court $50,000,000 is impounded in treasuries of the oil company awaiting decision of the cases determining ownership. The Supreme Court has held in abeyance the Smith vs. Turner case involving the same oil lands, pending the fuller testimony of these later cases.

MEETING AT PENN STATE

STATE COLLEGE, Pa., Oct. 29.—The petroleum advisory board of Pennsylvania State College will hold its fall meeting on Saturday, November 5, at the college.

The purpose of the meeting will be to outline the plan of procedure with regard to petroleum research work during the coming year. A special research department is conducted at State College for the purpose of devising better production methods and prolonging the life of the mineral resources of the state.

The petroleum advisory board of State College is made up of oil men who are in business in Pennsylvania.

E. D. HUBBELL DIES

Edward D. Hubbell, age 54, died at his home in Midwest, Wyo., Sunday, October 23, from pernicious anemia. He was born in Clarksfield, Ohio, and started working in the Salt Creek oil field in 1918, as chief engineer of the Midwest Refining Co. at pump station No. 1.

California Crude Oil Prices

STANDARD OIL CO. OF CALIFORNIA
(Effective June 26, 1932)

For current purchases of crude oil at the well (unless otherwise specified.) (All gravities above those quoted take highest price offered in that field.)

Gravity—	Signal Hill (Long Beach)	Seal Beach, Alamitos Heights, Huntington Beach	Inglewood	Playa Del Rey	Olinda-Brea Canyon	Torrance	Richfield	Coyote Hills	Santa Fe Springs	Midway-Sunset, Elk Hills, Buena Vista Hills	Lost Hills	Athens, Rosecrans, Dominguez	Montebello	Wheeler Ridge	Coalinga	Whittier-LaHabra
14-14.9	$.65	$.65	$ 65	$.65	$.65	$.65	$.65	$.65	....	$ 55	$.55	....	$.65	$ 55	$.55	$.65
15-15.9	.65	.65	.65	.65	.65	.65	.65	.65	....	55	.55	....	.65	.55	.55	.65
16-16.9	.65	.65	.65	.65	.65	.65	.65	.65	....	55	.55	....	.65	.55	.55	.65
17-17.9	.65	.65	.65	.65	.65	.65	.65	.65	....	55	.55	....	.65	.55	.55	.65
18-18.9	.65	.65	.65	.65	.65	.65	.65	.65	....	55	.55	....	.65	.55	.55	.65
19-19.9	.65	.65	.65	.65	.65	.65	.65	.65	....	55	.55	....	.65	.55	.55	.65
20-20.9	.69	.69	.71	.69	.69	.69	.69	.65	....	59	.59	....	.65	.57	.59	.68
21-21.9	.74	.74	.77	.74	.74	.74	.74	.66	....	63	.63	....	.67	.60	.62	.72
22-22.9	.79	.79	.82	.78	.79	.79	.79	.70	....	69	.69	....	.70	.63	.65	.77
23-23.9	.84	.84	.88	.82	.84	.84	.84	.76	....	.75	.75	....	.73	.66	.68	.83
24-24.9	.89	.89	.92	.86	.89	.89	.89	.81	$.73	.81	.81	$.89	.76	.69	.72	.89
25-25.9	.93	.93	....	.91	.93	.93	.93	.86	.79	.87	.87	.93	.80	.72	.75	....
26-26.9	.97	.97	....	.96	.97	....	....	.90	.84	.92	.91	.97	....	....	....	....
27-27.9	1.00	....	....	....	1.00	....	....	.94	.89	.97	.94	1.00	....	....	....	....
28-28.9	1.03	....	....	....	1.03	....	....	.98	.94	1.02	.99	1.03	....	....	....	....
29-29.9	1.06	....	....	....	....	....	....	1.02	.98	1.07	1.02	1.06	....	....	....	....
30-30.9	1.09	....	....	....	....	....	....	1.05	1.02	1.12	1.05	1.09	....	....	....	....
31-31.9	....	....	....	....	....	....	....	....	1.06	....	....	1.12	..	..	..	....
32-32.9	....	....	....	....	....	....	....	....	1.10	....	....	1.15	....	....	....	....
33-33.9	....	....	....	....	....	....	....	....	1.14	....	....	....	....	....	....	....
34-34.9	....	....	....	....	....	....	....	....	1.18	....	....	....	....	....	....	....
35-35.9	....	....	....	....	....	....	....	....	1.22	....	....	....	....	....	....	....

The Texas Company, effective June 26, posted same prices as the Standard Oil Co. in Signal Hill, Alamitos Heights, Huntington Beach, Torrance, Richfield, Montebello, North Whittier and Santa Fe Springs.

The Union Oil Co., effective June 26, posted the same price as the Standard Oil Co. in the Signal Hill, Alamitos Heights, Seal Beach, Huntington Beach, Athens, Rosecrans, Dominguez, Torrance, Santa Fe Springs, Playa Del Rey, Coyote, Olinda, Brea Canyon, Richfield and Montebello. In Coalinga, Lost Hills, Kern River, McKittrick, Midway-Sunset, Elk Hills and Buena Vista Hills the Union Oil Co. met the Standard Oil Co.'s prices from 14 gravity upward, but posted a price of 50 cents for oil 11 to 13.9 degrees in gravity.

General Petroleum adopted Standard Oil Co.'s prices, effective June 26, in Rosecrans, Signal Hill, Alamitos Heights, Santa Fe Springs, Inglewood, Torrance, Brea Canyon and Olinda, up to 25.9 degrees; Richfield, Midway-Sunset, Kern River, Mount Poso, Round Mountain and Coalinga and posted in Rincon as follows: 22-22.9 degrees, 68 cents; 23-23.9 degrees, 73 cents; 24-24.9 degrees, 78 cents; 25-25.9 degrees, 82 cents; 26-26.9 degrees, 86 cents; 27-27.9 degrees, 89 cents; 28-28.9 degrees, 92 cents; 29-29.9 degrees, 95 cents; 30 degrees and over, 98 cents. In Rosecrans, General Petroleum Co. pays 65 cents for 14 to 19.9 gravity oil; 20-20.9 degrees, 69 cents; 21-21.9 degrees, 74 cents; 22-22.9 degrees, 79 cents; 23-23.9 degrees, 85 cents, and Standard's prices for oil of higher gravity.

Associated Oil Co., effective June 26, met Standard Oil Co.'s prices in Signal Hill, Huntington Beach, Seal Beach, Alamitos Heights, Richfield, Torrance, Inglewood, Athens, Rosecrans, Dominguez, Santa Fe Springs, McKittrick, Kern River, Midway-Sunset, Elk Hills, Buena Vista Hills, Lost Hills, Belridge and Coalinga.

Kettleman Hills—The Union Oil Co., effective June 26, posted 33-33.9 gravity oil at 91 cents; 34-34.9 degrees, 93 cents; 35-35.9 degrees, 95 cents; 36-36.9 degrees, 97 cents; 37-37.9 degrees, 99 cents; 38-38.9 degrees, $1.01; 39 degrees and over, $1.03. Standard Oil Co., Associated Oil Co. and General Petroleum Co. adopted same price schedule on same day.

Santa Paula—The Union Oil Co. and The Texas Company, effective June 26, posted as follows: 14 degrees to 19.9 degrees, 66 cents; 20-20.9 degrees, 69 cents; 21-21.9 degrees, 72 cents; 22-22.9 degrees, 75 cents; 23-23.9 degrees, 78 cents; 24-24.9 degrees, 81 cents; 25-25.9 degrees, 84 cents; 26-26.9 degrees, 87 cents; 27-27.9 degrees, 90 cents; 28-28.9 degrees, 93 cents; 29 degrees and above, 99 cents.

Shields Canyon and South Mountain—The Texas Company, effective June 26, posted same prices as in Santa Paula.

Orcutt—The Union Oil Co., effective June 26, posted prices as follows: 16 degrees to 19.9 degrees, 55 cents; 20-20.9 degrees, 59 cents; 21-21.9 degrees, 63 cents; 22-22.9 degrees, 69 cents; 23-23.9 degrees, 75 cents; 24-24.9 degrees, 81 cents; 25-25.9 degrees, 87 cents; 26 degrees and above, 92 cents.

Playa Del Rey—Subject to a field gathering charge of 5 cents per barrel.

Newhall, McKittrick and Kern River—Standard Oil Co., effective June 23, 1931, posted 55 cents for oil of all grades.

Elwood Terrace—Standard Oil Co., effective June 26, 1932, posts 33-33.9 degrees, $1.04; 34-34.9 degrees, $1.10; 35-35.9 degrees, $1.16; 36-36.9 degrees, $1.22; 37-37.9 degrees, $1.28. All prices f.o.b. ships.

Ventura Avenue—General Petroleum Co. and Associated Oil Co. effective June 26 posted as follows: 22-22.9 degrees, 72 cents; 23-23.9 degrees, 77 cents; 24-24.9 degrees, 82 cents; 25-25.9 degrees, 86 cents; 26-26.9 degrees, 90 cents; 27-27.9 degrees, 93 cents; 28-28.9 degrees, 96 cents; 29-29.9 degrees, 99 cents; 30 degrees and over, $1.02.

Potrero—Associated Oil Co., effective June 26, posted same prices as are paid by all companies in Athens, Rosecrans and Domingues.

Humble Will Purchase All Royalty Oil From Its Leases in Texas

HOUSTON, Tex., Oct. 31.—The Humble Oil & Refining Co. announced Saturday it would purchase all the royalty owned crude oil under its own leases that has been stored during the past few weeks.

The Humble company's decision to buy the royalty oil which has been stored in its program of purchasing only 60 per cent of the Railroad Commission allowable in several fields does not apply to outside customers.

A statement was issued by W. S. Farish, president of the Humble company, as follows:

"To our royalty owners on leases of the Humble Oil & Refining Co. affected by the recent 60 per cent purchase and 40 per cent storage announcement:

"While we are unable to modify our recently announced program of purchasing in certain areas only 60 per cent of the allowable production from outside properties with which we have pipe line connections and of running for market only 60 per cent of the allowable from our own leases and storage and the remaining 40 per cent therefrom, we decided to make settlement with the royalty owners on the leases owned and operated by us for 100 per cent of the royalty oil heretofore run and until further notice will continue such policy.

"Credits and settlements are being made with our royalty owners accordingly.

"If your interest is in line for payment we will forward in a few days check in settlement for your interest in runs during the month of September for which settlement has not already been made. Settlements in due course will be made on accounts not now in line for payment."

Late Fields

KANSAS

The Derby Oil Co. announces that it has reduced its nominations in the Hollow Pool, in Harvey County, to 500 bbls. daily.

Phillips Petroleum Co. and White Eagle Oil Corp. have each increased their nominations in the Ritz-Canton Pool 1,000 bbls. per day.

Mid-West Refining Co. and others' No. 1 Wilson, C NW SW, Section 13-18-14w, Barton County wildcat, has resumed drilling at 2,325 feet after fishing out an underreamer lug.

Olson Oil Co. and others' No. 2 Rudicel, C NW SW, Section 24-23-4w, Reno County, found a showing of oil in the chat and are preparing to make a production test.

In the south Voshell Pool, in McPherson County, All States Oil Co.'s No. 2 Wall, SE cor. SW, Section 21-21-3w, is being drilled deeper into the chat. It was drilled to a total depth of 3,122 feet or 66 feet into the chat, before being deepened.

In Rooks County, H. Boyson and others' No. 1 Silvers, C NE, Section 21-8-19w, an old producing well that was being drilled deeper, found water in the Siliceous lime at 3,447-64 feet and is shut down.

OKLAHOMA

According to military headquarters in the Oklahoma City Field there will be 792 wells with a total potential of 3,928,982 bbls. eligible for production during November. There are 126 wells making water but three of these are not eligible for production. It was estimated that the current underproduction would be 83,597 bbls. and that the estimated stocks on November 1 would be 978,208 bbls., compared to 789,986 bbls. on October 1. October production was estimated at 2,340,505 bbls. while the oil shipments from the field were estimated at 2,152,283 bbls. The allowable for the month was 2,424,102 bbls. Production of the lime zone wells average 877 bbls. daily.

Approximately 150,000 bbls. of underproduced oil was cancelled in a journal entry issued by the Oklahoma Corporation Commission, on water allowables in wells in the Oklahoma City Field. In the future all underproduced wells in that field will carry forward only underproduction created by inability of the well to make its allowable. The order became effective October 31.

Ramsey Petroleum Co.'s No. 1 Gun Club, NW cor. NE Section 10-16-4w, a wildcat west of Guthrie, Logan County, cored the Layton sand at 4,924-35 feet, where a show of water was reported. It was drilling deeper at 4,960 feet.

Phillips Petroleum Co.'s No. 1 Kohout, NW cor. NE SE Section 22-11-3w, flowed 929 bbls. of oil in one and one-half hours through a 6-inch choke from the Wilcox sand at 6,434-95 feet. The gas was estimated at 60,000,000 feet a day.

Northwest of the Oklahoma City Field, Carter Oil Co. and others' No. 1 Shawbell, C SW NE Section 1-12-3w, a community test, was drilling at 4,340 feet. It was coring the different formations to determine how the well was running on structure.

Phillips Petroleum Co.'s No. 1 Head, SE cor. SW NE Section 22-11-3w, in the Oklahoma City Field, flowed 1,481 bbls. of oil in two hours from the Wilcox sand at 6,475-6,529 feet. The gas was estimated at 9,500,000 feet a day. It was produced through a 4-inch choke.

East Texans Declare Field Shall Not Be Opened to Ruinous Overproduction

TYLER, Tex., Oct. 29.—Resolutions aiming to insure the orderly production and marketing of oil in the East Texas Field were passed at a mass meeting of 1,500 East Texas landowners, oil producers and others interested, held in the Smith County District Courtroom.

The strongest action taken was the adoption of a resolution introduced by Lloyd Wheelock of Corsicana, which asked Gov. Ross S. Sterling immediately to call a special session of the legislature for the purpose of strengthening existing laws so conservation may be attained in conformity with decisions already handed down by the courts. The resolution pointed out that if the East Texas Field is opened to unrestrained flow foreign interests would profit from the greed of a few operators, further stressing the danger of breaking down orderly production now existing because of inadequate conservation laws, held invalid, which the passage of proper legislation by a special session could avert.

Representations were present from all East Texas counties in which oil is produced "to thwart the minority that would destroy their birthright," as one speaker said. They met on common ground, many who heretofore had opposed regulating the field agreeing that production must be held to the figure set by the Railroad Commission.

Carl Estes was chairman of the meeting and among the speakers were R. T. Jones of Henderson, Judge Edwin Lacey of Longview, Malcolm Crim of Kilgore, Senator Thomas G. Pollard of Tyler, Clifford Mooers of Longview, Cyril A. Parker of Longview, Bobby Manzel of Gladewater and Charles F. Roeser of Fort Worth, president of the Texas oil and gas conservation committee. Resolutions were introduced by Mr. Wheelock, P. G. Lake of Tyler, Joe R. Pearson of Corsicana and Mr. Estes.

These resolutions commended the Railroad Commission, two members of which were present, C. V. Terrell and Lon Smith as well as R. G. Parker, superintendent of the oil and gas division; Attorney General James V. Allred, Colonel Davidson and the military for the part they already have played in upholding orderly production.

The special session can pass laws giving the commission authority to adjust production of all Texas fields according to market demand and this is the only solution in the present situation, Mr. Roeser declared. The commission has striven to curtail production as far as the law allows, he said, but the present laws are inadequate. Current consumption requirements should be the basis of production orders, he said, and market demand is in no way price fixing.

"Field Must Not Be Opened"

Another resolution adopted, with all groups agreeing, was that the field must not be opened and exploited with the consequent ruthless waste; that, regardless of the validity or invalidity of conservation laws, both landowners and producers resolved on the strict observance of regulations governing production and promulgated by the Railroad Commission; that purchasers will not buy oil from anyone producing in excess of the daily allowable figure fixed by the commission; that transporters, pipe lines and all transporting railroads will not haul oil produced in excess of the fixed allowable, and that everyone immediately will report to Homer Pierson, chief of the commission's investigating unit, any opening up of a well in the field or any excess production from a well or wells; and last that "if the worst comes and it develops that we have no laws in this country which will protect the oil property rights of the people of East Texas from selfish and greedy exploitation and consequent speedy destruction, and that we can not get any relief from the state or Federal governments, as a last measure of self-preservation, this body automatically resolve itself into a vigilance committee and act accordingly."

TANK WAGON CHANGES

(Continued from Page 26)

were reduced 1 cent in Boise and Twin Falls, Idaho.

Magnolia Petroleum Co. advanced the gasoline tank wagon and station price 1 cent October 24 in Dallas and Fort Worth to 13½ and 16 cents. On October 20 the gasoline tank wagon and station prices were advanced in Muskogee to 12½ and 15 cents and in Oklahoma City and Tulsa to 13½ and 16 cents. On October 26 the gasoline tank wagon and station prices were advanced to 16 cents each in Texarkana, to 15½ cents each in Fort Smith, Ark., and to 17½ cents each in Little Rock, Ark.

Standard Oil Co. of Louisiana reduced the gasoline tank wagon and station price one-half cent in Knoxville, Tenn., on October 19. On October 22 these prices were reduced 2 cents each in Alexandria, La.

Standard Oil Co. of Ohio advanced the statewide gasoline tank wagon and station prices one-half cent on October 26.

Standard Oil Co. (Indiana) advanced the gasoline station price 1 cent in Des Moines, Iowa, October 20. On October 22 the station price was reduced to 13 cents in St. Joseph, Mo. Effective October 31 a new schedule of discounts was adopted on Chicago Oil Heat Institute prices as shown in the accompanying tables.

Standard Oil Co. (Kentucky) reduced kerosene to 8 cents in Augusta, Ga., on October 15. On October 18 the gasoline tank wagon and station prices were advanced to 18½ cents in Covington, Ky. On October 21 these prices were advanced to 19 cents in Tampa, Fla. On October 11 these prices were advanced to 18 cents and on October 21 to 19 cents in Miami, Fla. On October 26 the company made a general advance in the gasoline tank wagon and station prices, the revised schedule being shown in tabular form here. On October 28 these prices were advanced to 19 cents in Covington, Ky.

CRUDE OIL PRICE CHANGES

(Continued from Page 26)

This company had met the recently posted 12-cent increases on all grades, but the October 28 notice puts the company back on its former price basis along with Carter Oil Co., Stanolind Crude Oil Purchasing Co. and Derby Oil Co.

Yates Pool Production Over 152,500,000 Bbls. on Its Sixth Birthday

On October 28 the Yates Field was six years old and had produced over 152,500,000 bbls. of oil. There are now 400 producing wells in the field, all producing through choke. The field has a daily allowable production of 65,000 bbls. The Mid-Kansas Oil & Gas Co. is the largest producer in the field, the Gulf Production Co., the California Co., Shell Petroleum Corp., Continental Oil Co., and the Humble Oil & Refining Co. being other large producers.

The Illinois Pipe Line Co., Shell Pipe Line Co. and Humble Pipe Line Co. have the three main oil carriers leading from the field.

The largest producing well in the field was credited with a daily potential of over 204,000 bbls. when it was completed, the world's record, but the potential was based on an open flow of one hour or less. The discovery well struck oil at 995 feet and was completed at a total depth of 1,005 feet for an initial production of 95 bbls. per hour. It is owned by the Mid-Kansas Oil & Gas Co. Ira G. Yates is fee owner of the majority of the land in the field.

Only one well has been drilled in the Yates Field this year.

A small shallow pool was opened just northwest of the Yates Field, producing from a pay which is logged from 350 to 500 feet. This pool is called the Toborg-Tippett Pool. The Shell Petroleum Corp. runs the oil.

Full Text of Decision on Proration in East Texas

(Continued from Page 11)

thinly veiled pretense of going about to prevent physical waste the commission has, in co-operation with persons interested in raising and maintaining prices of oil and its refined products, set on foot a plan which, seated in a desire to bring supply within the compass of demand, derives its impulse and spring from, and finds its scope and its extent in the attempt to control the delicate adjustment of market supply and demand, in order to bring and keep oil prices up," and here, as there, that orders so entered may not stand.

The Forbidden Thing

Further, if we disregard the statutory prohibition against restricting supply to "equal existing market demand," we think it equally plain that plaintiffs are entitled to relief. For, enacted not with an eye single to fairly exert admitted constitutional power to regulate the use of private property while it permits the full use consistent with such regulation, but with an eye evil, because it has looked too much on the forbidden thing, keeping supply within demand (Constantin supra—Yicko vs. Hopkins, 118 U. S. 371) the rules have been entered and are being enforced in such fashion as to subject plaintiffs' property to a confiscatory control, which transcending public necessity, has exerted the power granted beyond the necessities of the case, both in that it has arbitrarily and without adequate grounds limited the total production of the field far below any amount which the evidence fairly shows the interest of the owners, consistent with public necessity, permits; and particularly in that in direct contravention of the statute, instead of justly and equitably distributing the reduction ordered, it has, through its per well requirement, so arbitrarily, unjustly and in a confiscatory way distributed it as that it will inevitably take the oil of plaintiffs situated as they are, most favorably on the structure, to give it to others not so favorably situated.

Plaintiffs may prepare their decree, and giving notice of time and place to counsel for the commission, present it to the district judge for settlement and entry, within 15 days.

Study of Oil Research Work Under Way Shows Wide Diversity of Engineering Problems

By L. G. E. BIGNELL
Petroleum Engineering Editor

Few persons not intimately connected with the technical phases of the petroleum industry realize the great progress that has been made in the application of engineering practices to the various departments of the oil business. It was only a few years ago that the petroleum engineer was practically unknown and the work of drilling and producing oil wells was handled entirely by practical production men who had been raised in the industry and had gained their experience first hand by actual field work. The refinery branch of the industry has long employed technically trained men in their manufacturing plants and laboratories and they still continue to carry on extensive research programs.

The effect of bringing into the industry technically trained men to serve in all departments has done much to stabilize conditions and while there was a tendency in some quarters to place the blame for overproduction that occurred a few years ago upon the engineer for devising new and better ways for producing oil this criticism has been withdrawn because the engineering departments of all oil companies are now actuated largely by the economic phase of industrial conditions rather than by the mechanical effect of producing oil.

With the introduction of the gas lift in Seminole Field a great flood of oil was brought into the market with a decline in prices and the accumulation of considerable volumes of oil in storage aboveground. This excess production led to the first application of proration.

Executives quickly learned that the engineer could be used to produce oil in a conservative and economical manner and more profitably than by introducing competitive methods by which great volumes of oil were quickly taken from the ground to the detriment of the industry as a whole. What one company could accomplish by the application of new methods in securing oil another company would quickly adopt with the result that everyone in the field was producing at greater rates than market demands and prices were falling accordingly.

The next step in the development of engineering practice was to get the engineer to use approved and economic methods within reasonable bounds and scale down the rate of production to somewhere near the market demands. This stabilized prices and conserved reservoir energy and introduced great savings into the production of oil.

This tendency toward conservation was being applied to all fields with good results until the discovery of the East Texas oil fields when a large number of inexperienced men broke into the industry and worked upon the theory that volume of oil would give greater profits. This resulted in the orgy of production in that field in July, 1931, with its accompanying decline in prices to a new low level and a loss of profits to all.

New Methods Being Applied

Looking back into the history of the oil industry it will be seen that there has always been a certain mystery connected with the origin and accumulation of petroleum in its underground reservoirs. Intensive studies of these problems by the geologists and geophysicists have been carried on and are still under way and much has been learned about oil accumulations that is having practical application in the discovery and production of oil and gas.

The production men have also been faced with a problem of measuring energy contained in the underground reservoirs and working out ways of using that energy to the best advantages. Subsurface pressure gauges have come into very common use in many oil fields and it is particularly encouraging to note that through the use of these instruments a great deal more is now known about East Texas oil field than was previously known of older pools after they had been on production the same time as East Texas.

This study of underground pressures in the East Texas Field has changed the original ideas of many regarding the possibilities of that field to produce oil and while it is still believed that this area has vast potentials of oil for future delivery it is generally agreed that it can be recovered only by restricted production rates to maintain slow drop in reservoir pressures.

There are several reliable instruments now available for the taking of subsurface pressures and engineers in many companies are building up records of wells in many fields that are doing much to place before the production departments data of great value in planning methods of production for various leases and areas.

This study of subsurface pressures is being supplemented by bottom-hole sampling involving the actual recovery of oil and gas opposite the producing horizon in the wells and bringing these samples to the surface unchanged so that they may be studied carefully in laboratories. Work of this kind is now being carried on in East Texas by the engineers of the U. S. Bureau of Mines in co-operation with engineers of many of the major oil companies having properties there. It is anticipated that as a result of this work the engineers will be able to plot decline curves for various areas in the East Texas Field with greater accuracy and forecast the probable time when the natural flowing conditions will cease and the wells will have to be produced by mechanical means.

Many New Practices Applied

Within the past five years there has been a very marked increase in the development of new engineering practice and a brief review of the trend of these studies will show that in 1926 the engineers were concerned with the principles and methods of increasing recovery of oil and sand conditions and the application of gas lifts was the subjects of many papers. The application of vacuum to oil sands was being discussed and flooding problems were being given serious consideration and the work in the Bradford Field, Pennsylvania, was actually started. There was even some discussion of oil mining anticipating the application of this method of recovering oil to make up for expected shortage predicted.

In 1927 air-gas lift methods and gas-oil ratios were having much consideration and the results of the application of air-gas lift to wells in many fields was being studied and discussed. Increased extraction of oil from the underground reservoirs still occupied a prominent place in all technical meetings and the fear of oil shortage was still expressed by many.

The following year, 1928, witnessed the consideration of rotary drilling methods with the first consideration being given to the use of instruments for the purpose of surveying drilled holes and reducing the amount of declination from the vertical to a minimum. Deep well pumping and spacing of oil wells was also beginning to receive serious consideration and further work was reported upon, covering the study of oil recovery from reservoirs. In this year the first consideration of the qualities of rotary drilling mud was taken up and many practical suggestions were offered.

Meetings held in 1930 were devoted to the study of well spacing and the hydraulics of flowing wells, and the increased extraction of oil was still being given a lot of consideration. Research work on the oil recovery, cementing of wells and drilling mud was reported on.

During all this period there had been intermittent discussion of the application of unit operation of oil pools and in 1931 many of the meetings of the engineering societies took up this work from their viewpoint and discussed mechanical details as they applied to this general problem. There were meetings of attorneys and engineers and an exchange of ideas that led to very definite advancement of this idea.

Discussion of bottom-hole pressures received their first consideration last year and many other production problems dealing with bottom-hole chokes, tubing sizes and tapered strings of tubing were up for consideration.

A.P.I. Activities

Many of the projects listed above are financed in whole or in part by funds supplied by the American Petroleum Institute and a reading of the list of the many and diversified types of work undertaken will give an insight into the technical problems that confront the petroleum industry and will indicate quite clearly the great strides made during the past few years by this industry in improving the many operations required to discover, produce, transport and refine crude oil.

It is becoming the work of the technician to solve many new problems that are developed as the older ones are mastered and in this field of activity the members of the A.P.I. have always had a foremost part.

During the many years that this Institute has been in existence there has been built up within it committees of oil men to carry on its many activities and at present the Institute has organized and active about 335 boards, committees and subcommittees on which about 2,500 oil men are serving.

Those who have any doubt as to the future of the oil industry will do well to study the list of research problems given above and consider the activity of the committees of the Institute in directing this and other work. Any industry so active in solving its myriad of constantly developing problems cannot help but succeed in serving the public because by such an intensive study of its problems it is possible to keep up with changing conditions in every phase of the industry and insure to the American people an adequate supply of crude oil and its products for many years to come.

Research Activities

The U. S. Bureau of Mines has just issued an information circular No. 6,637, listing the research activities in the mineral industries of the United States, prepared by A. C. Fieldner and Alden H. Emery which covers a great many of the research problems engaging the attention of the mineral industries and particularly coal, petroleum, natural gas and asphalt; nonmetallic minerals and products; metallic ores and products and general problems.

Under the research work in the petroleum industry problems in origin, ge-

The Oil Man's Calendar

November

2-4—Indianapolis, Ind., Indiana Petroleum Association, Hotel Severin.

10—Los Angeles, Calif., California Natural Gasoline Association.

10-12—Atlanta, Ga., Southeastern Economic Conference.

14—Tulsa, annual meeting, Independent Petroleum Association of America, 10 a. m., Mayo Hotel.

15-17—Houston, Tex., thirteenth annual meeting, American Petroleum Institute.

December

5—New Orleans, La., tenth annual Asphalt Paving Conference, and Association of Asphalt Paving Technologists.

5-9—New York, N. Y., American Society of Mechanical Engineers.

9—Annual meeting, Independent Petroleum Association of Texas, Fort Worth.

5-10—New York, N. Y., National Exposition of Power & Mechanical Engineering.

6-8—Omaha, Neb., Nebraska Petroleum Marketers, Hotel Fontenelle.

(?) —Great Falls, Mont., Rocky Mountain Oil and Gas Association, Rainbow Hotel.

1933

January

9-10—Fargo, N. Dak., Annual Convention, Northwest Petroleum Association, North Dakota Division, Waldorf Hotel.

12-13—St. Paul, Minn., Annual Convention, Northwest Petroleum Association, Minnesota Division, Lowry Hotel.

February

15-17—Columbus, Ohio, Ohio Petroleum Marketers Association, Deshler-Wallick Hotel.

March

23-25—Houston, Tex., American Association of Petroleum Geologists.

April

20-21—Cleveland, Ohio, National Petroleum Association, Cleveland Hotel.

June

26-30—Chicago, Ill., annual meeting, American Society for Testing Materials, Stevens Hotel.

ology and prospecting for oil are being studied by special investigators in several universities and also by several companies directly interested in oil and gas. A few of these problems are:

Limestones and dolomites as reservoir rocks: The determination of geothermal gradients in oil fields on anticlinal structures; origin and environment of source sediments; studies of source rocks in the microfurnace; generation of oil in rocks by shearing pressures; oil and gas sands of the northern Appalachian region; general problems relating to the location of wells to tap the producing sands of natural gas or oil; methods of equipment used in searching for petroleum and natural gas; survey of natural gas for occurrence of helium; geophysical exploration for oil and gas deposits by gravimetric and seismic methods; identification and correlation of well samples; source materials of Indiana petroleum; surface and subsurface stratigraphy of Kansas; origin or structures in western Kansas and a method of surveying deep boreholes.

Paleontological Research

Micropaleontological study of Gulf Coast sedimentary rocks; sedimentational history of Gulf Coast region; natural gas resources of Montana; petrographic studies of Pennsylvania oil sands; paleontology of the cap rocks of the Bradford sand; oil-gearing shales in Ohio; engineering study of the Oklahoma City Field; continuity of sandstone beds and shale breaks in the Bradford oil sands; studies in sedimentation of Pennsylvania oil and gas sands; search for oil, the origin of petroleum from diatoms; location of structure and stratigraphic studies; attempt to further correlate geological data as especially applicable to natural gas prospecting; geological problems connected with West Texas development; geophysical investigation of oil-bearing formations; engineering study of the Roberts-Settle Pool, Texas; engineering study of the Zwolle Field, Louisiana; geologic relations, areal distribution, character, origin, quantity available, and to a certain extent the economic features of deposits of petroleum, oil shale, and bituminous rock, natural gas and asphalt; physical and chemical factors in the accumulation and discharge of petroleum, such as proportion of voids, pore size and shape, pore wall nature of petroleum (fluidity, gas content), purging fluids effective and available for weakening adsorption, permeability for water and oil production and control of open bonds; correlation of temperature with geologic structure in the oil fields; oil and gas distribution in Tennessee and Kentucky; gas in northern Alabama; and seismic-wave investigations in connection with geophysical prospecting for petroleum.

Development and Production

Under the division of development and production there is much active work divided between universities and commercial institutions in about equal part. Some of these activities are listed below:

Treatment of oil well sludges; study of flow of natural gas through pipe lines; study of methods for gauging and controlling natural gas wells; the fundamentals of the retention of oil by sand; determination of solubility of hydrocarbon gases in liquid hydrocarbons, the rate of solution, and the change in viscosity resulting from such solution; the efficiencies of all equipment used in drilling a rotary drilled oil well; conservation of gas to prolong flowing life of oil wells; mining of natural asphalts; dehydration of oil emulsions; the high voltage method of dehydration of petroleum; the viscosities of gas-oil froths; and the pressure gradient in the oil sands about a high pressure well.

A comparative study of methods of determining porosity and permeability of oil sands; the physical properties of mud laden fluids used in rotary drilling; flow of gas-oil mixtures through vertical pipes, with particular reference to the design of tubing installations in, and pressure control of, gas-lift and flowing wells; the effects of pressure, temperature and dilution on the setting properties and strengths of oil well cements; methods of recovery of oil by water and air pressure; permeability of oil sands; rate of solution and solubility at various temperatures and pressures of gases in crude oil; flow of oil, gas and water through sands; conditioning of rotary drilling mud with vibrating screens; centrifugal separation of crude oil from water and emulsion; rotary drill mud; demulsibility or demulsion of emulsions; treatment of mud laden fluid for drilling wells; nonferrous heavies for rotary muds; study of drilling technique to increase drilling speed, improve the quality of hole, prevent loss of holes, and eliminate troubles incident to drilling through high pressure gas zones; methods and equipment used in producing petroleum and natural gas; the treatment of oil field emulsions; study of oil sand drainage and effect on well spacing; study and development of production methods for maximum conservation of gas energy and most efficient utilization of gas released with oil; chemical problems connected with drilling, especially cement and rotary mud; oil recovery; relations of oil and gas under high pressures; the low temperature distillation of oil shale; stabilizing oil emulsions; increased recovery of petroleum from oil sands; interfacial tensions relations between sand, water and oil; porosity-permeability relations of Pennsylvania oil sands and disposal of oil field waters.

Underground Conditions

Effect of natural gas in recovery of oil; sucker rod trouble as encountered in oil wells; the flow of a gas-free oil through a spherical-grain sand; the flow of a gas saturated liquid through a capillary tube; the nature of the resistance to flow offered by a (cylindrical) gas bubble in a liquid-filled capillary tube; air-gas lift as applied to the flowing of oil wells; the efficiencies of all equipment used in drilling a rotary drilled oil well; oil production data for individual properties; study of water in oil sands; oil recovery from sandstone cores; solution viscosity changes in Pennsylvania crude oil when repressured with air or gas; relative oil recovery from cores of different characteristics when repressuring or flooding conditions are the same; does water or sodium carbonate solution remove the oil film from sandstone?; the plugging effect of sodium carbonate solution and calcium chloride solution in contact in the pores of sandstones; pressure drop in oil sands; effect of water in driving oil out of cores when core drilling; mechanics of fluid flow in oil sands; dehydration of petroleum emulsions by electrical process; applicability of electrical fields to removal of suspended and colloidal solids from petroleum; dehydration of crude oil emulsions; investigation of special drilling methods; the determination of desirable properties of water for flooding purposes; production methods; repressuring in Ranger deep production; analysis of oil field waters, conducted for purpose of top and bottom-hole shutoff; development and improvement of drilling and producing methods looking toward more economical and efficient means of development and recovery; methods of increasing recovery of oil.

A study of the solubility of natural gas in various crude oils; investigation of the effect on crude petroleum of air used in repressuring oil fields; study of the flow of crude oil through oil sand; investigation of pressures and temperatures in deep oil and gas wells; disposal of oil field waters; thermodynamic study of well efficiencies; increased oil recovery by repressuring methods; temporary shutting in of producing wells to conserve gas and oil underground; pressure-volume-temperature of crude oil-natural gas mixtures; nature of oil field emulsions and means of breaking them down; standardization of casing programs in oil and gas fields; control and extent of oil and gas drainage; repressuring of oil sands by injection of gas or air; identification of oil field waters and extraction of hydrocarbons from oil sands at Fort McMurry, Alberta, Canada.

Survey Shows World Gasoline Trade Changing

(Continued from Page 13)

23,000,000 bbls. The refineries of Persia and Dutch East Indies produced 80 per cent of the total output while the largest consumers, Australia, Japan, British India and New Zealand, utilized about 66 per cent of the total. Exports were over 13,000,000 bbls., almost all going to Europe, while imports were approximately 9,000,000 bbls., 78 per cent coming from the United States and the balance from Rumania and Russia. Production and consumption of the most important countries in the Oriental zone are:

	Prod. (in bbls.)	Consumption (in bbls.)
Dutch East Indies	12,993,000	1,505,000
Persia	10,572,000	301,000
Japan	2,269,000	5,125,000
British India	1,866,000	2,220,000
Australia	659,000	6,095,000
New Zealand	.....	1,792,000
Others	1,350,000	6,156,000
Oriental zone	29,709,000	23,194,000

It is not the authors' purpose to discuss in detail or analyze in this paper the numerous factors affecting the world gasoline trade. It is believed, however, that some of these factors merit consideration even in a general discussion of this nature.

United States Import Duty

The most important recent development affecting the world gasoline trade was the enactment in the United States of a tax on the imported product. This tariff which went into effect June 21, 1932, amounts to 2½ cents a gallon. As a result, the imports fell from 1,200,000 bbls. in June to less than 100,000 bbls. in July. It is further to be expected that the greater part of the gasoline exports from Dutch West Indies and Trinidad which formerly went to the United States must now seek an outlet elsewhere, possibly in the European zone. The volume of gasoline involved, about 12,000,000 bbls. per year, represents about 10 per cent of the world exports or close to the total output of Rumania. In the face of slightly declining consumption, the European market cannot absorb such quantities at the present time without displacing nearly an equal volume of gasoline that formerly was exported from the United States to Europe. This rerouting of exports has been facilitated through the acquisition by one of the largest American oil companies of extensive refining facilities in Dutch West Indies to take care of its European market directly from the South American zone.

Protective Legislation

Another factor influencing the international trade in gasoline is the trend of legislation which encourages the establishment of refineries within important importing countries. Although the effect of such protective legislation has not yet been fully felt by the American exporter, it is worth noting that England is now refining 20 per cent of its requirements and that France completed in 1932 two important refineries and is carrying forward a construction program that will take care of a larger part of its demand by 1935 when the Iraq production may be available. Germany, Spain and Italy are also making progress in this direction. Australia has definite plans to increase its refining facilities which already handle some 3,000,000 bbls. of crude annually and Japan is following the same policy.

Gasoline Substitutes

The use of gasoline substitutes is gradually assuming importance in nations having little or no crude production and which take this means to increase the consumption of domestic products in the manufacture of alcohol. These substitutes are used for blending with imported gasoline. The usual blending agent is derived from home grown products in Cuba, Brazil and France, and to less extent in Germany and various countries of Central Europe.

Other factors have to do with various local conditions affecting gasoline consumption. In such countries as the United States with one automobile to every 4.7 people, Canada and New Zealand with one automobile to every 8 people, and Australia where the ratio is one car to every 11 inhabitants, the trend of gasoline consumption depends to a great extent upon the development of paved roads and an increase in population. In the nations of northern and western Europe where the system of roads is well developed in relation to the areas of the countries, increasing consumption of gasoline depends largely upon the increase in the number of people who can buy and maintain gasoline consuming vehicles. This is especially true of Great Britain with 1 automobile to every 32 people, France where the ratio is 1 to 28, Germany 1 to 94, Spain 1 to 119, and Italy 1 to 142. The vast area outside of North America and western and northern Europe contains almost 80 per cent of the world's population but consumes only about 8 per cent of the world's production of gasoline. In this area with the few isolated exceptions of such countries as Australia and New Zealand the consmption of gasoline is almost entirely dependent upon the progress of road building and the economical development of the people. The future increasing development of these regions provide the greatest possibility for the future expansion of the world's gasoline trade.

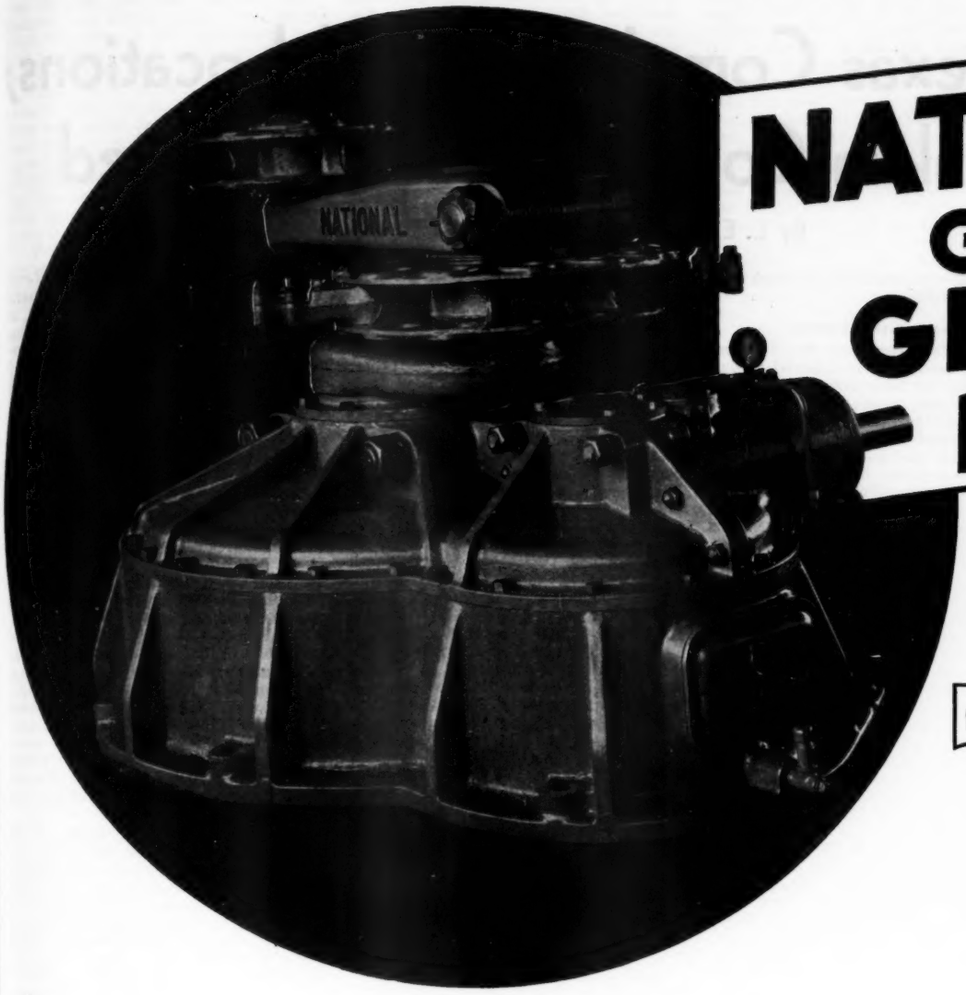
ROCKY MOUNTAIN RUNS

Average daily pipe line runs from fields in the Rocky Mountain territory for the week ending October 29 follow:

	Bbls.
Salt Creek	20,840
Big Muddy	1,950
Badger Basin	50
Byron-Garland	1,010
Byron (East)	100
Dallas-Derby	440
Dutton Creek	70
Ferris	50
Frannie	180
Grass Creek	1,190
Hamilton Dome	940
Hudson	340
LaBarge	1,050
Lance Creek	170
Lost Soldier	2,400
Midway	120
Oregon Basin	820
Osage	1,140
Pilot Butte	30
Rock River	1,040
Poison Spider	70
Teapot	30
Total Wyoming	34,030
MONTANA	
Buckley-Border	570
Cat Creek	820
Cut Bank	60
Dry Creek	730
Kevin-Sunburst	3,330
Lake Basin	20
Pondera	900
Total Montana	6,430
COLORADO	
Florence	280
Fort Collins and Wellington	630
Iles Dome	590
Moffat	610
Orchard	190
Rangely	50
Tow Creek	270
Total Colorado	2,670
NEW MEXICO	
Artesia	495
Caprock	750
Hogback	410
Jal	1,102
Rattlesnake	700
Table Mesa	85
Eunice	542
Hobbs	24,595
Lea	2,227
Texas-Pacific	79
Total New Mexico	31,360
Total Rocky Mounta area	74,490
Total previous week	74,391
Difference	99

SHREVEPORT GEOLOGISTS

SHREVEPORT, La., Oct. 31.—The Shreveport Geological Society will hold its regular monthly meeting in the courthouse at Shreveport November 4 at 8 p. m. A short paper by E. B. Baldwin, geologist of the Arkansas Natural Gas Co., on the possibilities of basal Jackson production of the Conroe trend in Texas and Louisiana will be read.



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Bulletin No. 1032-A containing complete details will be sent free upon request.

THE NATIONAL SUPPLY COMPANIES

Gain in East Texas Completions and Locations; Western Franklin County Test Abandoned

By L. E. BREDBERG

DALLAS, Tex., Oct. 31.—Completions in East Texas picked up over the previous week, increasing by 20 to 112, with 109 new tests starting as against 86. Four wildcat locations were also staked. There are now over 8,600 producers in the field, with approximately 400 other active tests drilling, making a total of 9,000 potential producers within the next four weeks.

The Shell Petroleum Corp. has leased the 9,000-acre ranch of William Simpton near its Centerville block in Leon County, on which it is drilling a deep test. The test is shut down at 5,363 feet where 9⅝-inch casing was cemented.

C. L. Mohan of Waco, Tex., has leased 2,600 acres of the McDuffy ranch, 7 miles northwest of Hubbard, in Hill County, and will drill a Woodbine sand test.

McMillan of Tulsa is to drill a 4,000-foot test on a block being leased 3 miles west of the town of West in Hill County.

J. B. Daniels has leased 12,000 acres in Anderson County, which extends south over into Leon County, and a test will no doubt be reported at a later date for this block.

W. H. Roeser and others have made location for No. 1 J. B. Hanks, in the Anderson County School Lands Survey, 15 miles northwest of Palestine, and 4½ miles northwest of Roeser and others' dry hole on the Moody land in the James Welch Survey, and is moving in rig for a Woodbine sand test.

Cranfill and Reynolds have a derrick up on their No. 1 Berry, 1 mile southwest of its No. 1 Rash producer in Upshur County. This will be an interesting test due to the Rash producer having been an outpost irregular well, and conditions of this area being erratic.

Franklin County

Prince and others have abandoned their No. 1 Ferguson in the Rogers Survey, western Franklin County. This test topped the Pecan Gap chalk at 1,309 feet and logged the base at 1,410 feet. The Austin chalk was logged from 2,310 to 2,505 feet. One paleontologist reported the base at 2,400 feet. The Woodbine series was topped at 3,035 feet. First red beds were encountered at 3,336 feet. Total depth is 3,752 feet in Georgetown lime. It cored salt water sand from 3,355-60 feet, and had a surface elevation of 369 feet. This test is approximately 4,100 feet northwest of Harper and others' No. 1 fee in the W. M. Dawson Survey. An offset test is to be drilled to the Harper and others' test, on which the crew is trying to get down a liner.

J. P. Evans is drilling a test on the Amerada Petroleum Corp.'s Kelsey Dome in Upshur County. The test topped the Pecan Gap chalk at 2,254 feet and is running about 40 feet lower than the Amerada Petroleum Corp.'s No. 1 Wade. The new test is drilling below 2,400 feet. Elevation is 413 feet.

The Humble Pipe Line Co. is constructing 6,000 feet of 6-inch loop in its Longview gathering system.

COMPLETIONS IN EAST TEXAS

Cherokee County

Mid-Kansas Oil & Gas Co.'s No. 7 H. D. Kelley, top sand 3,701 feet, initial production 35 bbls. per hour on 2-inch lead, total depth 3,704 feet.

North Gregg County

Amatex Petroleum Co.'s No. 3 Chanie Jones, top sand 3,676 feet, initial production 38 bbls. per hour through three-quarters inch tubing choke, total depth 3,710 feet. Atlantic Oil Production Co.'s No. 28 Judge, top sand 3,504 feet, initial production 64 bbls. per hour through tapered tubing, total depth 3,530 feet; No. 29 Judge, top sand 3,508 feet, initial production 64 bbls. per hour through tapered tubing, total depth 3,533 feet; No. 30 Judge, top sand 3,505 feet, initial production 64 bbls. per hour through tapered tubing, total depth 3,530 feet; No. 36 Judge, top sand 3,514 feet, initial production 64 bbls. per hour through open tapered tubing, total depth 3,533 feet; No. 37 Judge, top sand 3,511 feet, initial production 64 bbls. per hour through open tapered tubing, total depth 3,532 feet; No. 38 Judge, top sand 3,514 feet, initial production 64 bbls. per hour through open tapered tubing, total depth 3,535 feet; No. 39 Judge, top sand 3,512 feet, initial production 65 bbls. per hour through open tapered tubing, total depth 3,532 feet; No. 40 Judge, top sand 3,517 feet, initial production 64 bbls. per hour through tapered tubing, total depth 3,538 feet; No. 41 Judge, top sand 3,522 feet, initial production 64 bbls. per hour through open tapered tubing, total depth 3,540 feet; No. 42 Judge, top sand 3,518 feet, initial production 64 bbls. per hour through open tapered tubing, total depth 3,540 feet; No. 28 J. Moore, top sand 3,498 feet, initial production 64 bbls. per hour through open tapered tubing, total depth 3,525 feet; No. 8 Wilson estate, top sand 3,581 feet, initial production 64 bbls. per hour through tapered tubing, total depth 3,635 feet.

Brown Eagle Oil Co.'s No. 5 T.&P.R.R., top sand 3,597 feet, initial production 115 bbls. per hour through 1½-inch tubing choke, total depth 3,628 feet. Deep Rock Oil Co.'s No. 3 Pritchard, top sand 3,503 feet, initial production 50 bbls. in 15 minutes through open 2½-inch tubing, total depth 3,563 feet. East Texas Oil Co.'s No. 2 J. W. Fuller, top sand 3,619 feet, initial production 30 bbls. in 30 minutes through 1 and 1½-inch tapered tubing, total depth 3,637 feet; No. 6 Hindman, top sand 3,623 feet, initial production 40 bbls. per hour through 1 and 1½-inch tapered tubing, total depth 3,645 feet. F. H. E. Oil Co.'s No. 9 B. C. Christian, top sand 3,690 feet, initial production 125 bbls. per hour through 1-inch tubing choke, total depth 3,718 feet. Howe, receiver's No. 31-B Judge, top sand 3,503 feet, initial production 65 bbls. per hour through tapered tubing, total depth 3,525 feet; No. 34-B Judge, top sand 3,495 feet, initial production 64 bbls. per hour through open tapered tubing, total depth 3,528 feet.

Humble Oil & Refining Co.'s No. 3 J. M. Adams, top sand 3,472 feet, initial production 7 bbls. in 15 minutes through three-quarters inch tubing choke, total depth 3,480 feet; No. 10 T. B. Harris, top sand 3,550 feet, initial production 83 bbls. per hour through three-quarters inch tubing choke, total depth 3,578 feet; No. 13 W. R. Hughes, top sand 3,648 feet, initial production 61 bbls. per hour through three-quarters inch tubing choke, total depth 3,680 feet; No. 6 Willingham, top sand 3,669 feet, initial production 53 bbls. per hour through three-quarters inch tubing choke, total depth 3,693 feet. Lewis and others' No. 1 R. M. Wood, top sand 3,629 feet, initial production 30 bbls. in 15 minutes through open 2-inch tubing, total depth 3,650 feet. J. F. Lucey, receiver's No. 3 Anderson, top sand 3,519 feet, initial production 100 bbls. per hour through 1-inch tubing choke, total depth 3,560 feet.

Magnolia Petroleum Co.'s No. 7 W. E. Jones, top sand 3,691 feet, initial production 164 bbls. per hour through open 2-inch tubing, total depth 3,705 feet; No. 9 H. B. Zeigler, top sand 3,438 feet, initial production 176 bbls. per hour through 2-inch tubing choke, total depth 3,448 feet. C. C. McCormick's No. 1 S. Key, top sand 3,661 feet, initial production 35 bbls. in 30 minutes through three-quarters inch tubing choke, total depth 3,672 feet. Philphrey Brothers' No. 1 Whittle, top sand 3,663 feet, initial production 40 bbls. in 15 minutes through 2½-inch open tubing, total depth 3,686 feet. Roeser and Pendleton's No. 6-B Nicholson, top sand 3,648 feet, initial production 90 bbls. per hour through open 2-inch tubing, total depth 3,656 feet; No. 4-A Satterwhite, top sand 3,682 feet, initial production 90 bbls. per hour through open 2½-inch tubing, total depth 3,688 feet.

Shell Petroleum Corp.'s No. 4 H. Hampton, top sand 3,596 feet, initial production 15 bbls. in one-half hour through open tapered tubing, total depth 3,672 feet; No. 6 H. Hampton, top sand 3,646 feet, initial production 20 bbls. in one-half hour through tapered tubing, total depth 3,710 feet; No. 8 A. King, top sand 3,544 feet, initial production 15 bbls. in one-half hour through tapered tubing, total depth 3,620 feet; No. 12 Richey, top sand 3,531 feet, initial production 14 bbls. in one-half hour through tapered tubing, total depth 3,576 feet. Sun Oil Co.'s No. 8 J. N. Campbell, top sand 3,474 feet, initial production 41 bbls. per hour through open tapered tubing, total depth 3,552 feet; No. 4 E. C. Shoultz, top sand 3,609 feet, initial production 42 bbls. per hour through tapered tubing, total depth 3,670 feet. Tidal Oil Co.'s No. 14 Lake Devernia, top sand 3,497 feet, initial production 17 bbls. in 10 minutes through open 2-inch tubing, total depth 3,539 feet. C. Williams and others' No. 2 Bramley, top sand 3,484 feet, initial production 140 bbls. per hour through open 2-inch tubing, total depth 3,520 feet.

South Gregg County

Atlantic Oil & Production Co.'s No. 6 Whaley, top sand 3,598 feet, initial production 64 bbls. per hour through tapered tubing, total depth 3,608 feet. Blue Star Oil Co.'s No. 3-I Sabine River, top sand 3,538 feet, initial production 65 bbls. per hour through three-quarters inch tubing choke, total depth 3,546 feet (Tract No. 3); No. 7-F Sabine River, top sand 3,487 feet, initial production 30 bbls. in one-quarter hour through open 2½-inch tubing, total depth 3,507 feet (Tract No. 7). Cap Rock Oil & Gas Co.'s No. 1 Mrs. N. Crane, top sand 3,520 feet, initial production 45 bbls. per hour through open 2-inch tubing, total depth 3,585 feet. C. M. Cope's No. 1 Doctor Crane, top sand 3,519 feet, initial production 50 bbls. per hour through open 2-inch tubing, total depth 3,591 feet. Delta Drilling Co.'s No. 2 Hughey-Ross, top sand 3,528 feet, initial production 65 bbls. per hour through open 2-inch tubing, total depth 3,585 feet. H. Schulman's No. 1 Dorris, top sand 3,530 feet, initial production 15 bbls. per hour by heads, total depth 3,582 feet.

Gulf Production Co.'s No. 38 Hilburn Estate, location abandoned; No. 13 W.

Hebron Field in Pennsylvania Has Open Flow Capacity of 51,640,000 Feet

By SPECIAL CORRESPONDENT

COUDERSPORT, Pa., Oct. 29.—Following the completion of Rogers and others' No. 1 Clare as a 3,600,000-foot gas well from Oriskany sand, the center of interest in the Hebron Field in Potter County is the Hammondsport Oil & Gas Co.'s No. 1 W. H. Gale, which was last reported as 6 feet in the Oriskany sand with no gas showing. The well is 400 feet lower in elevation than any of the producing wells in the field, the surface elevation being 2,199 feet. The top of the Tully limestone was found at 4,794 feet, the top of the Onondaga limestone at 5,319 feet and the top of the Oriskany sand at 5,732 feet.

Rogers and others' well extended the gas producing area in the deep sand so that it is reckoned the field as far as it has been defined, is 10 miles long and 2 miles wide. It was the fifth producer out of six wells completed in the Hebron Field, one having been a failure, and brought the open flow capacity of the field up to 51,640,000 feet per day. The two wells of Hungiville and others on the Booth farm were good for 13,640,000 feet per day; Williamsport Natural Gas Co.'s producer showed an open flow of 16,400,000 and the Wyoga Oil & Gas Co.'s No. 1 Schrack gauged 18,000,000 feet.

The deep test on the land of the Emporium Lumber Co. in the East Fork district is having a difficult fishing job, with the hole at a total depth of 6,370 feet. The bit and 3,500 feet of wire line are lost in the hole.

In Tioga County the Elkland Oil & Gas Co. is drilling on the Van Dusen farm at 3,620 feet, having drilled through the Tully lime, topped at 2,550 feet.

In Lawrence Township, Tioga County, the Penn United Co. is running casing at 3,918 feet on Lawrenceville bank property.

Over the line in New York State S. J. Brendell has a salt water hole in his test on the Sheldon farm in Allegany County.

Near Geneva, Ontario County, New York, the S. J. Brendell interests have made a location for a test on the Joseph Lynch farm, three quarters of a mile from the recently drilled discovery well in that field.

The Empire Gas & Fuel Co., which has had a line in the Hebron Field in Potter County for years, is taking gas from the Booth lease in Hebron on which there are two wells, one of which opened the Hebron Field as a deep sand gas area.

The North Penn Gas Co., through an engineer, has been spotting possible industrial sites along the route of its gas lines, the survey extending from Canton in Bradford County to Oil City, Venango County. As a result it seems very likely that a shirt factory will locate soon at Canton and that the silk mill at Galeton, Potter County, will be reopened in the near future.

Holt, top sand 3,588 feet; initial production 62 bbls. per hour through three-quarters inch tubing choke, total depth 3,598 feet; No. 14 Holt-Laird-Crim, top sand 3,558 feet, initial production 66 bbls. per hour through three-quarters inch tubing choke, total depth 3,571 feet. Jim Henley's No. 1 H. E. Thomas, top sand 3,736 feet, initial production 75 bbls. per hour through open 2-inch tubing, total depth 3,737 feet. Jones and O'Brien's No. 10 Hughey-Ross, top sand 3,507 feet, initial production 30 bbls. in one-quarter hour through open 2-inch tubing, total depth 3,655 feet. John Mabee's No. 5 M. T. Cole, top sand 3,545 feet, initial production 45 bbls. in one-quarter hour through 2½-inch open tubing, total depth 3,554 feet.

Marcus Oil Co.'s No. 5 Clayborn, top sand 3,703 feet, initial production 18 bbls. in one-quarter hour through 2-inch open tubing, total depth 3,707 feet. Newman and others' No. 1 O. Prothro, top sand 3,636 feet, initial production 140 bbls. per hour through open 2-inch tubing, total depth 3,660 feet. Octagon Oil Co.'s No. 4 Blackman, top sand 3,675 feet, initial production 21 bbls. in one-quarter hour through three-quarters inch tubing choke, total depth 3,677 feet. Radatz' No. 4 Sabine River, Tract No. 8, top sand 3,420 feet, initial production 30 bbls. in one-quarter hour through open 2-inch tubing, total depth 3,470 feet. Rhoads Drilling Co.'s No. 1 Sabine River, top sand 3,535 feet, initial production 30 bbls. in one-half hour through open 2-inch tubing, total depth 3,550 feet; No. 2 Sabine River (Tract No. 5), top sand 3,535 feet, initial production 30 bbls. in one-half hour through 1-inch tubing choke, total depth 3,550 feet; No. 1 Sabine River (Tract No. 7), top sand 3,443 feet, initial production 30 bbls. in one-half hour through 1-inch tubing choke, total depth 3,463 feet.

Shell Petroleum Corp.'s No. 10-A B. F. Laird, top sand 3,521 feet, initial production 14 bbls. in one-half hour through tapered tubing, total depth 3,554 feet; No. 20 J. B. Watson, top sand 3,529 feet, initial production 15 bbls. in one-half hour through tapered tubing, total depth 3,586 feet. Sinclair Prairie Oil Co.'s No. 3 H. J. Thomas, top sand 3,696 feet, initial production 15 bbls. in one-quarter hour through 2½-inch open tubing, total depth 3,699 feet. Stroube and Stroube's No. 2 Bealle, top sand 3,544 feet, initial production 25 bbls. per hour through tapered tubing, total depth 3,566 feet. Tidal Oil Co.'s No. 13 M. G. Barton, top sand 3,585 feet, initial production 16 bbls. in 10 minutes through 2-inch tubing, total depth 3,595 feet; No. 13 M. B. Hughey, top sand 3,494 feet, initial production 9 bbls. in five minutes through open 2-inch tubing, total depth 3,521 feet; No. 6 W. B. Lacy, top sand 3,540 feet, initial production 11 bbls. in five minutes through open 2-inch tubing, total depth 3,552 feet.

North Rusk County

East Texas Refining Co.'s No. 4 East Andy Givens, top sand 3,650 feet, initial production 43 bbls. per hour through three-quarters inch tubing choke, total depth 3,670 feet. Humble Oil & Refining Co.'s No. 47 L. D. Crim, top sand 3,604 feet, initial production 95 bbls. per hour through three-quarters inch tubing choke, total depth 3,644 feet; No. 5 R. H. and W. L. Laird, top sand 3,575 feet, initial production 111 bbls. per hour through three-quarters inch tubing choke, total depth 3,590 feet; No. 3-A Henry Sexton, top sand 3,740 feet, initial production 22 bbls. in one-quarter hour through three-quarters inch tubing choke, total depth 3,760 feet. Hill and Reed's No. 1 W. D. Peterson, top sand 3,580 feet, initial production 200 bbls. per hour through 2½-inch open tubing, total depth 3,624 feet. Luling Oil & Gas Co.'s No. 1 Barton, top sand 3,676 feet, initial production 76 bbls. in one-half hour through 1-inch tubing choke, total depth 3,701 feet. G. C. Woods Co.'s No. 3 Scroggins, top sand 3,650 feet, initial production 45 bbls. per hour through three-quarters inch tubing choke, total depth 3,655 feet.

South Rusk County

American Liberty Oil Co.'s No. 5-C Pinkston, top sand 3,579 feet, initial production 43 bbls. per hour through open 2-inch tubing, total depth 3,675 feet. Central Oil Co.'s No. 2 E. B. Alford, top sand 3,538 feet, initial production 43 bbls. in three hours by heads through tubing, total depth 3,600 feet. Devonian Oil Co.'s No. 7 Milstead, top sand 3,670 feet, initial production 60 bbls. per hour through three-quarters inch tubing choke, total depth 3,768 feet. Falcon Oil Co.'s No. 9 T. O. Mason, top sand 3,614 feet, initial production 50 bbls. per hour through open 2-inch tubing, total depth 3,631 feet.

Humble Oil & Refining Co.'s No. 20-A Kangerga, top sand 3,665 feet, initial production 29 bbls. in one-half hour through three-quarters inch tubing choke, total depth 3,631 feet; No. 6-A H. A. Piercy, top sand 3,720 feet, initial production 42 bbls. in one-half hour through three-quarters inch tubing choke, total depth 3,748 feet; No. 6-A Virginia Turner, top sand 3,731 feet, initial production 32 bbls. in one-quarter hour through three-quarters inch tubing choke, total depth 3,752 feet. Hunt Production Co.'s No. 3-B Sue Hale, top sand 3,607 feet, initial production 12 bbls. per hour pumping, total depth 3,713 feet; No. 5 A. B. Wooley, top sand 3,684 feet, initial production 35 bbls. per hour through open 2-inch tubing, total depth 3,740 feet. E. O. N. Johnson's No. 3 Daisy Bradford, top sand 3,612 feet, initial production 64 bbls. per hour through open 2-inch tubing, total depth 3,708 feet. Lucy Petroleum Co.'s No. 6 B. F. Maxwell, top sand 3,645 feet, initial production 75 bbls. per hour through open 2-inch tubing, total depth 3,694 feet. Joy McCartney's No. 1 Deason, top sand 3,580 feet, initial production 40 bbls. per hour through open tubing, total depth 3,700 feet.

McIntyre Oil Co.'s No. 2-A Thompson, location abandoned. Malarnee and Bullock's No. 4 E. B. Alford, top sand 3,629 feet, initial production 48 bbls. in two hours by heads, total depth 3,732 feet. Mid-Kansas Oil & Gas Co.'s No. 33 W. T. Grissom, top sand 3,621 feet, initial production 88 bbls. per hour on 2-inch lead, total depth 3,660 feet; No. 3 Kangerga, top sand 3,672 feet, initial production 66 bbls. per hour on 2-inch lead, total depth 3,677 feet; No. 6 J. M. Price, location abandoned; No. 12 M. A. Price, top sand 3,603 feet, initial production 76 bbls. per hour on 2-inch lead, total depth 3,689 feet; No. 4 T. O. Warren, top sand 3,612 feet, initial production 98 bbls. per hour on 2-inch lead, total depth 3,656 feet. George Ray's No. 5 Wilson, top sand 3,594 feet, initial production 40 bbls. per hour on 2-inch open tubing, total depth 3,622 feet.

Stanolind and Pure Oil Co.'s No. 18 R. A. Moores, top sand 3,585 feet, initial production 40 bbls. in 39 minutes through open tubing, total depth 3,643 feet. Sun Oil Co.'s No. 3 Cooper, location abandoned; No. 5-B Schuler (Joint), location abandoned. The Texas Company's No. 3 W. W. Henry, top sand 3,663 feet, initial production 45 bbls. per hour through open 2-inch tubing, total depth 3,668 feet; No. 5 W. W. Henry, top sand 3,673 feet, initial production 45 bbls. per hour through open 2-inch tubing, total depth 3,675 feet. Tidal Oil Co.'s No. 4-A Thompson, top sand 3,655 feet, initial production 20 bbls. in one-quarter hour through open 2-inch tubing, total depth 3,680 feet. Reilly and McRoberts' No. 1 M. L. Thompson, top sand 3,720 feet, initial production 100 bbls. per hour through open 2-inch tubing, total depth 3,729 feet. Karl Witt and others' No. 1 H. B. Leverett, top sand 3,795 feet, initial production 90 bbls. per hour through open 2-inch tubing, total depth 3,796 feet.

Smith County

Amalgamated Oil Co.'s No. 4 S. S. Cooke, top sand 3,716 feet, initial production 33 bbls. in one-quarter hour through open 2-inch tubing, total depth 3,719 feet. Brogan Oil Co.'s No. 3 T. O. Wright, top sand 3,700 feet, initial production 60 bbls. in one-half hour through open 2-inch tubing, total depth 3,730 feet. Golden Eagle Oil Co.'s No. 1 L. S. Sartain, top sand 3,847 feet, dry and abandoned, total depth 3,852 feet, James Jordan Survey. Humble Oil & Refining Co.'s No. 7 M. C. Thompson, top sand 3,660 feet, initial production 18 bbls. per hour through open 2½-inch tubing, total depth 3,666 feet. Sinclair Prairie Oil Co.'s No. 21-A Mayfield, top sand 3,786 feet, initial production 50 bbls. per hour through open 2½-inch tubing, total depth 3,794 feet. Sun Oil Co.'s No. 1 Mattie Burns, top sand 3,739 feet, initial production 40 bbls. per hour through open 2-inch tubing, total depth 3,741 feet. The Texas Company's No. 5-B Jarvis, top sand 3,711 feet, initial production 90 bbls. per hour through open 2-inch tubing, total depth 3,714 feet.

Upshur County

Arcadia Refining Co.'s No. 4 A. O. Phillips, top sand 3,676 feet, initial production 23 bbls. per hour through open 2-inch tubing, total depth 3,701 feet. Humble Oil & Refining Co.'s No. 18 J. K. Edwards, top sand 3,652 feet, initial production 57 bbls. per hour through three-quarters inch tubing choke, total depth 3,679 feet; No. 12 Holland, top sand 3,620 feet, initial production 73 bbls. per hour through three-quarters inch tubing choke, total depth 3,651 feet. J. E. Mabee and others' No. 3 Whitehurst, top sand 3,629 feet, initial production 30 bbls. in one-quarter hour through open 2½-inch tubing, total depth 3,633 feet. Ransom and Sheppard's No. 1 Stiles, top sand 3,717 feet, initial production 50 bbls. per hour through open 2-inch tubing, total depth 3,726 feet. Simms and Russ' No. 9 J. J. Flewellen, top sand 3,725 feet, initial production 80 bbls. per hour through open 2½-inch tubing, total depth 3,733 feet.

East Central Texas Wildcats

Week Ending October 31

ANDERSON COUNTY

Company, well, farm name, section and block—	Remarks:
W. H. Rosier's No. 1 W. H. Henke, 48,115 varas S and 294 varas W of NE cor. of Blk. No. 12, Anderson County School Lands Sur.	Location.
C. R. Wilmuth et al's No. 1 N. B. Watson, 500 ft. from W line and 4,850 ft. from N of S line of survey in S½ of 129-ac. tract, M. Main Sur.	T.D. 1,538 ft.

ANGELINA COUNTY

Crosbie et al's No. 1 John C. Davis, 150 ft. from N of center of tract and survey, John H. Graham Sur.	Drlg. 215 ft.
W. J. Chandler's No. 1 L. J. Dearman, 350 ft. from S and W lines of 20-ac. tract, J. T. Peavy Sur.	Drlg. 952 ft.

BOWIE COUNTY

Roy Anderson's No. 1 Dykes, 2 miles W of Texarkana, M. Dykes Sur.	Will set csg.; T.D. 2,810 ft.
Tom Bell et al's No. 1 C. M. Moss, 1,800 ft. from N line and 2,150 ft. from W line of 465-ac. tract and survey, O. D. Walton Sur.	Location.

CHEROKEE COUNTY

Barkley Tate et al's No. 1 H. E. Neal, 330 ft. from N and W lines of tract, J. M. Prosella Sur.	Derrick.
Bridges and Candler's No. 1 Berryman, center of Berryman tract, H. Kimble Sur.	S.D. 1,000 ft.
Davis et al's No. 2 Annie Kelly, 631 ft. W of No. 1, M. De Los Santos Coy Sur.	Derrick.
Hooper et al's No. 1 Doctor Overton, 330 ft. from N and E lines of tract and 330 ft. out of most easterly NE cor. of survey, Wesley Dikes Sur.	Waiting on derrick.
Hooper et al's No. 1 A. Pace (formerly Clopton), 288 ft. from N line and 330 ft. from most northerly E line of 40-ac. lease, Wesley Dikes Sur.	S.D. 3,665 ft.
L. J. Hopcroft et al's No. 1 J. R. Taylor, 2,600 ft. from E line and 2,000 ft. from S line of survey, G. M. Doherty Sur.	Location.
Wilson & Stubbs' No. 1 L. Robert, 450 ft. from S and 150 ft. from W line of lease, J. B. Wolfin Sur.	S.D. 3,600 ft.

DELTA COUNTY

Commerce Oil Co.'s No. 1 Ablowich, 150 ft. from S line and 776 ft. from W line of H. D. Jewett 52-ac. tract, E. Chick Sur.	S.D. 3,813 ft.
Joiner et al's No. 1 Blackwell, 800 ft. S and 150 ft. from E lines of 275-ac. tract, Dunnetelle Sur.	S.D. 3,310 ft.

ELLIS COUNTY

Armstrong's No. 1 Milton Cook, SE cor. of 50-ac. tract, S. Frederick Sur.	S.D. 375 ft. (corrected).
Armstrong Bros.' No. 1 Reeves	S.D. 300 ft.
Armstrong Bros.' No. 1 John Lee Winn, 1,650 ft. from E and 150 ft. from S of Orland, Orlo Wheeler Sur.	S.D. 1,435 ft.
Clark Brooks' No. 1 Anderson, SE cor. of 3,900-ac. tract, 10 miles SW of Waxachachie, E. C. Branch Sur.	S.D. 1,050 ft.
Paris Oil Co.'s No. 1 O. S. Bain, 1,500 ft. from S line and 300 ft. from W line of 60-ac. lease, R. M. Williams Sur.	S.D. 985 ft.

FRANKLIN COUNTY

Tom Harper's No. 1 fee, 150 ft. from N line and 200 ft. from E line of 116-ac. tr., W. M. Dawson Sur.	Reaming to set liner; T.D. 3,330 ft.
Fred Price et al's No. 1 Mattie E. Ferguson, 150 ft. from S and W lines of tract and survey, Z. Rogers Sur.	Top sand 3,035 ft.; salt water sand 3,356-62 ft.; drlg. 3,690 ft.

FREESTONE COUNTY

Clyde Creighton's No. 1 Holley Bros., 854 ft. from W line and center of N and S lines of lease, A.B.M. Sur.	S.D. 3,669 ft.

GREGG COUNTY

Joe Anderson et al's No. 1 G. Shaw, center of 3-ac. lease, W. H. Dixon et al's No. 1 Clayborn, 400 ft. W of Angle and Kirkendall, I. Beaty Sur.	Drlg. 1,000 ft. (corrected).
Jack Berry's No. 2 G. Davis, 150 ft. from S line and center of E and W lines of lease, W. P. Chisum Sur.	Testing; T.D. 3,654 ft.
Jack Bialock's No. 1 State School Lands, 150 ft. from S line and 69 ft. from W line of lease, State Land Sur.	Set surface csg.
D. F. Buffington's No. 1 S. L. Dansby, 150 ft. from S line and 1,700 ft. from E line of 30-ac. lease, W. P. Chisum Sur.	Drlg. 2,980 ft.
Corbin et al's No. 1 A. H. Tubbs, 330 ft. from S and W lines of 50-ac. lease, D. Sanches Sur.	T.D. 3,596 ft.; S.D.
Drilling Exploration Co.'s No. 1 Hamon, 183 ft. N and 46 ft. W of most easterly NE cor. of Stanolind's Cox and Hamon lease, W. H. Castleberry Sur.	Running tubing; T.D. 3,535 ft.
Rose V. Glasscock's No. 2 A. V. Bacle, 152 ft. W and 155 ft. N of NE cor. of Gulf's Bacle lease, G. W. Hooper Sur.	Drlg. 1,410 ft.
George Glover et al's No. 1 C. Dickson, 330 ft. from N line and center of E and W lines of 9-ac. tract, S. Baggett Sur.	Drlg. 2,600 ft.
Lewis Godlin's No. 1 E. L. Walker, 330 ft. N of road, 330 ft. from E line of 80.2-ac. tract, M. Dillard Sur.	Derrick.
Groveman and Dorian's No. 1 M. E. Church, center of N half of Blk. No. 4, M. Dillard Sur.	Drlg. 2,860 ft.

(Continued on Page 40)

WILDCAT COMPLETIONS

Anderson County

W. H. Rosier's No. 1 M A. Davy, derrick abandoned.

Angelina County

Bell-Patton and Herbert's No. 1 Long Bell Lumber Co., dry and abandoned, total depth 2,740 feet.

Van Pool—Van Zandt County

Pure Oil Co.'s No. 3 R. L. Wells, initial production 234 bbls. first 24 hours after choked for proration, total depth 2,963 feet. The Texas Company's No. 8 R. A. Tunnell, initial production 50 bbls. first 24-hour gauge after choked for proration, total depth 2,893 feet.

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Interesting Test Being Drilled in Reeves County; Reagan County After New Depth Record

By L. E. BREDBERG
Fort Worth Bureau, The Oil and Gas Journal

FORT WORTH, Tex., Oct. 31.—Another deep test in Irion County is now plugging. This is Stanolind Oil & Gas Co.'s No. 1 Williams in Section 1,196, T.T.R.R. Survey. Total depth is 7,425 feet. Plymouth Oil Co.'s No. 1 Suggs, in the same county, was recently abandoned at a total depth of 8,281 feet. With the completion of this last test only one other deep test is drilling in the West Texas district outside of the Big Lake Field, Reagan County. This is Stanolind Oil & Gas Co. and others' No. 1 Todd in Section 67, Block UV, G.C.&S.F. Survey, Crockett County. Another deep test in Fisher County has been held up temporarily straightening a crooked hole.

An interesting test is being drilled on an 1,800-acre block 1½ miles northwest of Toyah in Reeves County, in an area in which six other tests have been drilled, good showings of oil and gas having been made in the majority of these tests, but not proving commercial producers. Rita Oil Corp. and Cordova Union Oil Corp. are drilling this test, which is on the Wright ranch in Section 58, Cassel's Survey. It will be drilled to 4,000 feet or the Delaware sand. At the present time it is shut down at 250 feet. Elevation is 2,961 feet. Sun Oil Co., Continental Oil Co., Rio Grande Oil Co., Magnolia Petroleum Co., California Co. and others have offset and nearby acreage.

Big Lake Oil Co. is drilling to test the Ordovician lime at a greater depth than heretofore penetrated by any of the 11 deep producers in the Big Lake Field, Reagan County. The company is carrying its No. 1-C University as deep as possible, possibly to 11,000 or 12,000 feet, which would not only set a new world's depth record, but might also penetrate other oil pay horizons. It is now drilling below 9,015 feet, five feet within the total depth of the deepest producer in the field, Group No. 1 Oil Corp.'s No. 3-B University, which ceased to flow in August.

The Ector County wildcat of Broderick and Calvert on the Parker Ranch in Section 15, Block 44, Township 2s, T.&P. Survey, which has been one of the most interesting tests in this county of late, was given a 100-quart shot from 4,370-95 feet, and filled 1,100 feet with live oil, but has been abandoned. It had several showings of oil above sulphur water which was encountered from 4,477-78 feet and an increase from 4,482-85 feet, and these showings, with the showing made following the shot, may lead to a second test being drilled in this area. Total depth was 4,485 feet, but it was plugged back to 4,441 feet before shooting. It is located approximately 7 miles north and slightly east of the Penn Pool.

A special order has been issued by the Railroad Commission temporarily reinstating the 65,000-bbl. top allowable for the Yates Field, Pecos County. The amended order which went into effect October 15 had reduced the field to 55,000 bbls. daily, but the Mid-Kansas Oil & Gas Co. obtained an injunction against the commission and therefore the field had been only partly producing in accordance with the new allowable. Reinstatement of the old 65,000-bbl. allowable figure was made to prevent unequal withdrawals of crude in the field. The majority of the companies operating offset wells to the Mid-Kansas Oil & Gas Co.'s producers had held production to the commission allowance, except in a few cases where circumstances forced them to equal the flow of the restraining company's wells. This is the second time the commission has raised the allowable to 65,000 bbls. after reduction had been made.

Gulf Production Co. is constructing a dam to impound water covering 10 acres near the junction of two canyons in the low hills 11 miles northeast of Crane City in Crane County. The dam will be 20 feet high and 150 feet long. The small lake is being created for a water supply for development of the McElroy ranch lease held by the company.

J. C. Maxwell and others' No. 1 Brillhart, three-quarters mile extension in the northwest end of the Grand Falls area, southern Ward County, and located in Section 13, Block 34, H.&T.C. Survey, had an increase in oil this week from 2,465-73 feet, and flowed 75 bbls. daily with tools in the hole at the latter depth. Gas was estimated at 5,000,000 feet. It extends production northeast from Buster Black's No. 1 Hall and Roberts.

RANGER AND WICHITA FALLS

An important purchase was made by the Lone Star Gas Co. when it took over the properties of the gas division of the Texas Public Utilities Corp. and all of the Southern Oil & Production Co.'s properties in the Ranger district.

Properties of the Texas Public Utilities Corp. involved in the deal consists of gas lines, booster stations and about 50 miles of main line gas lines, meters and other equipment. The main line of this company transports gas to the Leon power plant southeast of Eastland which has a daily capacity of 17,000,000 feet. The gas line extends from the power plant to the Strawn Townsite Pool in Palo Pinto County, and from the Chesley gas pool north of Cisco in northwest Eastland County to the power plant.

The Southern Oil & Production Co. owned, either outright or an interest, in a number of producing properties, mostly gas production in Eastland, Stephens, Callahan and Shackelford Counties. Gas production of the company totals 29,000,000 feet per day, and it has about 600 bbls. of oil production per day. It owned leases on about 36,000 undeveloped acres in the four counties.

In the Fry Pool, west half of Brown County, The Texas Company deepened its No. 29 Lowe in the G. Stubblefield Survey in an effort to increase production, but after drilling to 1,738 feet without success it is now being plugged back to the Fry sand at 1,259-79 feet, at which depth it was producing.

On the west edge of the Chalk Hill Pool, northeast Archer County, Burns and Long's No. 2-T Wilson in Lot 3, Block 75, A.T.N.C.L. Survey, has been completed in the Canyon sand at a total depth of 2,217 feet for an initial production of 124 bbls. Top of sand was logged at 2,214 feet.

Three miles north of Archer City and 2 miles southwest of the Chalk Hill Pool, W. I. Hutcheson and others have a derrick up for No. 1 fee, a 2,350-foot test. Location is in Lot 8, Section 123. Shallow producers on this lease are owned by Gulf Production Co.

Wildcat Operations in West Texas

Week Ending October 31

BORDEN COUNTY

Company, well, farm name, section and block—	Remarks—
Westyde Investment Co.'s No. 1 Looney, 990 ft. from S and E, Sec. 15, Blk. 31, Twp. 4n, T.&P. Sur.	Drlg. 2,295 ft.

BREWSTER COUNTY

Brewster Oil Co.'s No. 1 fee, 2,640 ft. S and 2,598 ft. E of NW cor., Sec. 45, Blk. G-15, G.C.&S.F. Sur.	S.D. 1,935 ft.
E. L. Chapman's No. 1 Skinner, C SW SE Sec. 100, Blk. 2, G.C.&S.F. Sur.	S.D. 1,303 ft.
Joiner's No. 1 McIntire, 853 ft. from S and 2,390 ft. from E, Sec. 31, Blk. 352, W. J. Mitchell Sur.	S.D. 240 ft.
Trans-Pecos Oil & Gas Co.'s No. 1 Jones, 930 ft. from N and 2,500 ft. from E of Sec. 18, Blk. G-15, G.C.& S.F. Sur.	S.D. 2,900 ft.
Van McPhail's No. 1 McIntyre, SE cor. Sec. 59, Blk. 352, 7 miles south Alpine	S.D. 1,750 ft.

Beesley et al's No. 1 Waring Estate, 400 ft. from N and E, Sec. 162, T.&N.O. Sur.	Running 6-in. csg. 2,485 ft.
Simmons et al's No. 1 Schultz, 150 ft. from W and center N and S of E half of J. Weber Sur., Abst. 154.	S.D. 1,410 ft.

CROCKETT COUNTY

Chambers et al's No. 1 Hoover, 1,650 ft. N and 330 ft. from E Sec. 1, Blk. FF, B.&B. Sur.	Drlg. 325 ft.
Doleman & Moore's No. 1 Ferner, 2,135 ft. from N and 1,485 ft. from E of Sec. 36, Blk. 2, I.&G.N. Sur.	Spudded and S.D.
Stanolind Oil & Gas Co. et al's No. 1 Todd, 1,370 ft. from N and 1,320 ft. from E, Sec. 67, Blk. UV, G.C.&S.F. Sur.	Set 9⅝-in. csg. at 6,130 ft.; T.D. 6,143 ft.
The Texas Company's No. 1 B. B. Ingham, 330 ft. from S and 2,310 ft. from E line, Sec. 36½, I.&G.N. Sur.	Show gas 1,955 ft.; fishing 1,971 ft.
J. D. Young Co.'s No. 1 Shannon, 330 ft. from N and W, Sec. 35, Blk. 1, G.C.&S.F. Sur.	S.D. 235 ft.

CULBERSON COUNTY

Harris & Haun's No. 1 fee	Drlg. 1,378 ft.
Milton-Dorsey's No. 1 Biggs, 4,181 ft. from N and 150 ft. from E, Sec. 3, Blk. 112, P.S.L. Sur.	Location.

DAWSON COUNTY

Albaugh et al's No. 1 Robinson, C NW Sec. 46, Blk. M, E.L.&R.R. Sur.	Shut down.

ECTOR COUNTY

Broderick & Calvert's No. 1 Parker, 330 ft. from N and W, Sec. 15, Blk. 44, Twp. 2s, T.&P. Sur.	S.D. 4,485 ft.; hole filled 900 ft. with fluid after shot; T.D. 4,485 ft.
Duffey et al's No. 1 Rutledge, 990 ft. from S, 330 ft. from E, Sec. 7, Blk. B-15	Drlg. 1,587 ft.
L. C. Harrison et al's No. 1 Addis, 330 ft. from N and 1,320 ft. from W, Sec. 35, Blk. 43, Twp. 2s, T.&P. Sur.	T.D. 3,690 ft.; to drill ahead.
Landreth Prod. Co.'s Holt, C SW of SE Sec. 15, Blk. 43, Twp. 1n, T.&P. Sur.	Cellar.
Phillips Pet. Co.'s No. 1 Scharbauer, 990 ft. from S and 330 ft. from W Sec. 43, Blk. 44, Twp. 2s, T.&P. Sur.	S.D. 3,751 ft.; shot; flowed 199 bbls. in 5 days.
Thomas et al's No. 1 Edwards, 330 ft. from S, 2,310 ft. from E, Sec. 38, Blk. 43, Twp. 3s, T.&P. Sur.	S.D. 3,200 ft.; drlg. 1,950 ft. on new hole.
H. F. Wurts' No. 1 E. A. Ibbetson et al, 330 ft. from N and E lines of NW Sec. 16, Blk. 46, Twp. 3s, G. M. M.Br.&A. Sur.	S.D. 3,605 ft.

EL PASO COUNTY

Tri-State Oil Co.'s No. 1 Bobadella, 1,325 ft. from S and E lines Sur. 254, S.F. No. 7,247	T.D. 3,190 ft.

FISHER COUNTY

Cranfill & Reynolds' No. 1 George, 400 ft. from N and 330 ft. from E, Sec. 200, Blk. 1, B.B.B.&C. Sur.	T.D. 6,289 ft.; straightening hole.
Southern Oil Co.'s No. 1 Purdue, 990 ft. from S and E Sec. 202, Blk. B, B.B.&C. Sur.	T.D. 2,781 ft.

GLASSCOCK COUNTY

A. C. Mann's No. 1 Moore, C NE, Sec. 11, Blk. 35, Twp 3s, T.&P. Sur.	Drlg. by bit 3,045 ft.
Noble Drlg. Co.'s No. 1 Baker, 160 ft. from N and 1,116 ft. from E, Sec. 21, Blk. 33, Twp. 2s, T.&P. Sur.	Location.
Phillips Pet. Co.'s No. 1 Baker, 150 ft. from N and 1,520 ft. from E, Sec. 21, Blk. 33, Twp. 2s, T.&P. Sur.	T.P. 2,120 ft.; 1,700 ft. oil in hole; T.D. 2,122 ft.
Phillips Pet. Co.'s No. 2 Baker, 338 ft. from N and 2,305 ft. from E, Sec. 21, Blk. 33	Location.
Shell Pet. Corp.'s No. 2 Phillips, 2,310 ft. from N and 1,650 ft. from E, Sec. 23, Blk. 33, Twp. 2s	Location.
Tribal Oil Co.'s No. 1-B Edwards, 180 ft. from S and 1,145 ft. from E, Sec. 16, Blk. 33, Twp. 2s, T.&P. Sur.	Drlg. 1,190 ft.

HOWARD COUNTY

American-Maracaibo's No. 5-A Settles, 1,896 ft. from N, 1,884 ft. from W, Sec. 6, Blk. 32, T.&P. Sur.	T.D. 185 ft.

(Continued on Page 41)

COMPLETIONS IN WEST TEXAS

Crane County

Gulf Production Co.'s No. 100 McElroy, top salt 1,115 feet, top pay 2,780 feet, initial production 340 bbls., 1 per cent b.s. and salt water, total depth 2,994 feet.

Pecos County

Adams and others' No. 1 Shearer, top pay 1,128 feet, initial production 43 bbls., total depth 1,417 feet, elevation 2,428 feet.

Ward County

Eastland Oil Co.'s No. 2 Green, top salt 875 feet, top pay 2,285 feet, initial production 50 bbls., total depth 2,398 feet, elevation 2,398 feet; No. 1-A Weiss, top salt 980 feet, top pay 2,278 feet, initial production 65 bbls., total depth 2,381 feet; No. 2 Weiss, top pay 2,287 feet, initial production 50 bbls., total depth 2,405 feet, elevation 2,542 feet; Renaud-Prettyman's No. 1 University, top salt 1,695 feet, top pay 2,684 feet, initial production 167 bbls., total depth 2,763 feet, elevation 2,623 feet.

COMPLETIONS IN PANHANDLE DISTRICT

Gray County

Jewell Oil Co.'s No. 1 Meers, initial production 4,000,000 feet of gas, total depth 3,483 feet. Travis and others' No. 2-B Webb, top pay 2,443 feet, shot 190 quarts 2,440-90 feet, initial production 200 bbls., total depth 2,495 feet.

Hutchinson County

Canadian River Gas Co.'s No. 2-A Dunaway, top pay 2,260 feet, initial production 32,300,000 feet of gas, total depth 2,770 feet.

East Central Texas Wildcats

(Continued from Page 37)

Groveman and Dorian's No. 1 State, center of Mineral Sur., Tract No. 112 ..... Rig up.
Guinn Petroleum Co.'s No. 1 J. S. and F. Elder, 200 ft. NE of Solar's No. 1 Elder, and 450 ft. SE of Martin's No. 1 Elder, M. V. Winkle Sur. ..... Derrick.
A. R. Hancock's No. 2 L. H. Brawley, 550 ft. E of No. 1 P. McAnnelly Sur. ..... Moved derrick off.
T. D. Humphrey et al's No. 1 Branson, center of 3.11-ac. lease, D. Meredith Sur. ..... Drlg. 3,627 ft.
J. J. Jordan's No. 1 E. L. Walker, 660 ft. W of SE cor. of lease and 155 ft. from S line and 155 ft. from river, E. A. Lambert Sur. ..... T.D. 3,596 ft.
E. Lacy et al's No. 1 fee, 144 ft. S and 150 ft. E of NE cor. of Shell's Neill lease, M. V. Winkle Sur. .... Drlg. 300 ft.
Lester and Duffield's No. 2 I. Moore, 330 ft. from W line of lease and 660 ft. S of No. 1, F. W. Johnson Sur. ..... Drlg. 3,400 ft.
Madalyn Oil Co.'s No. 1 J. V. Rossen, 550 ft. N and S and 100 ft. E and W of tract, T. Johnson Sur. ..... Waiting on cmt. to set 105 ft.
Magnolia Petroleum Co.'s No. 2 H. P. Hale, 330 ft. from W line of 50-ac. tract and 660 ft. S of No. 1, Tract No. 1, M. V. Winkle Sur. ..... Derrick.
Martin Drilling Co.'s No. 2 J. S. and F. Elder, 175 ft. from N line of lease and 500 ft. NE of No. 1, M. V. Winkle Sur. ..... Rig up.
C. C. McCormick's No. 1 S. Key, 1,000 ft. from S line of survey and 100 ft. from W line of survey, L. J. Rigsby Sur. ..... Testing; T.D. 3,672 ft.
H. W. McVey et al's No. 1 Baptist Church, center of SE of Blk. 153, M. V. Winkle Sur. ..... Rig up.
Mullendore and Berry's No. 1 E. H. Bramley, 110 ft. from N and S lines and 225 ft. from W line of lease, P. McAnnely Sur. ..... Rig up.
Newman et al's No. 2 O. Prothro, S offset to Iotex' No. 1 J. A. Knowles, J. Blair Sur. ..... Location.
J. B. Patty et al's No. 1 Farrell, 330 ft. S and 175 ft. W of NE cor. of E 50 acres of 148-ac. tract, D. Sanches Sur. ..... Derrick.
Pennsylvania Oil & Gas Co.'s No. 2 T. B. Harris, 330 ft. from S line and 150 ft. from W line of 20-ac. lease, J. Ruddle Sur. ..... S.D. 3,515 ft.
Producers Investment Co.'s No. 1 King, 20 ft. from N line and 125 ft. from W line of Blk. No. 117, M. V. Winkle Sur. ..... Derrick.
Rhodes Drilling Co.'s No. 1 Sabine River, Tract No. 4, 330 ft. from W line of lease and NE of Imperator's No. 1 Southworth ..... Waiting on cmt. to set; T.D. 3,-550 ft.
Rhodes Drilling Co.'s No. 2 Sabine River, Tract No. 4, 309 ft. NW of The Texas Co.'s No. 3 Cole ..... Derrick pattern.
Ruston Drlg. Co.'s No. 1 Sabine River, Tract No. 3, 320 ft. from E line of lease and 50 ft. N of S bank of river, State Lands Sur. ..... Waiting on cmt. to set; T.D. 3,-510 ft.
Ruston Drilling Co.'s No. 2 Sabine River, Tract No. 3, 660 ft. W of No. 1 ..... Derrick foundations.
Ruston Drilling Co.'s No. 3 Sabine River, Tract No. 3, 1,660 ft. W of E line ..... Rig up.
A. Snyder's No. 1 H. Adkins, 1,800 ft. from S line and center of a tract being N of S line of 5.37 acres of 9.37-ac. tract, Lot No. 2, D. Dainwood Sur. ..... Derrick.
South Gulf Prod. Co.'s No. 1 Cemetery, 225 ft. NW of Barnsdall's No. 1 McGrede, on one-half acre lease, D. Sanches Sur. ..... S.D. 200 ft.
J. B. Sowell's No. 2 W. P. Luce, 378 ft. W of No. 1, E. L. Walker Sur. ..... Derrick.
F. D. Spratt's No. 2 W. E. Bumpass, 140 ft. from S line and 80 ft. from E line of lease, L. J. Rigsby Sur. ..... Drlg. 2,660 ft
Sun Oil Co.'s No. 3 W. L. Fuller, 350 ft. from W line of lease and 660 ft. S of No. 1, D. Sanches Sur. ... Derrick.
W. C. Turnbow's No. 2 McKinley, 125 ft. N and 420 ft. E of NE cor. of Yount Lee's Harley lease, D. Sanches Sur. ..... Derrick.
Universal Oil & Gas Co.'s No. 2 Adkins, 750 ft. S of No. 1, D. Dainwood Sur. ..... Derrick.
Vance and Fagan's No. 1 W. N. Crim, 50 ft. out of NE cor. of Blk. No. 117, M. V. Winkle Sur. ..... Bldg. derrick.

HENDERSON COUNTY

B. L. Green et al's No. 1 M. H. Gussett (old well drilled deeper), 150 ft. from N line and 1,000 ft. from W line of 105.5-ac. tract, 3 miles SW of Mabank, L. D. Stover Sur. ..... S.D. 3,328 ft.
Dr. J. T. Kennon et al's No. 1 Rowe & Baker, 1,320 ft. from N line and 150 ft. from W line of survey and tract, Josiah T. Childress Sur. ..... S.D. 920 ft.
H. H. Meyer's No. 1 M. E. Olson, 2 miles S of Browns-boro tract in NW cor. of survey, George Wilson Sur. ..... Coring 3,260 ft.

HILL COUNTY

T. J. Spikes' No. 1 M. H. Davis, 150 ft. from S and E lines of 55-ac. tract, H. R. Alexander Sur. ..... Set 6⅝-in. csg.; T.D. 1,326 ft.

HOPKINS COUNTY

Burgess and Sinson's No. 1 First Natl. Bank, 470 ft. N and W of SE cor. D. Buie Sur., but located in the H.E.P.&P.R.R. Sur. ..... Prepare to spud.
Columbia Oil & Gas Co.'s No. 1 McCloud, 150 ft. from S line and 200 ft. from E line of lease, Holbrook Sur., elev. 485 ft. ..... Drlg. 2,050 ft.
Roark et al's No. 1 Taylor, 220 ft. from N and W lines of 80-ac. tract, in the John Polk Sur. ..... S.D. 540 ft.

HUNT COUNTY

A. Kelsey et al's No. 1 W. R. Berry, 450 ft. from S line and 300 ft. from E line of 139-ac. tract, J. Roads Sur. ..... Location.

KAUFMAN COUNTY

George Anderson's No. 1 W. N. Moody, 1,980 ft. S, 45 deg. E and 660 ft. S, 45 deg. W of NW cor. of survey, George Heider Sur. ..... S.D. 3,555 ft.
P. L. Meader's No. 1 T. C. Coleman, 673 ft. from S line and 460 ft. from W line of 259-ac. tract, W. G. Gibbard Sur. ..... S.D. 1,115 ft.

LAMAR COUNTY

Doyle and Jondeau's No. 1 Martin, 990 ft. from N line and 330 ft. from E line of tract, Joseph Deck Sur. ..... Rig up; T.D. 2,446 ft.

LEON COUNTY

Alladay et al's No. 1 W. R. Thompson, 320 ft. from N line of survey and 320 ft. from E line of 98-ac. tract, N. M. Allen Sur. ..... S.D. 2,170 ft.
Shell-Penn & Black's No. 1 W. M. Phillips ..... Drlg. 5,377 ft.

MORRIS COUNTY

Grover Hart's No. 1 Walcott and Lott, 250 ft. from N line and 330 ft. from E line of survey, 3 miles S of Carson, B. A. Russell Sur. ..... Rig up and S.D.
Joiner & Harris Drilling Co.'s No. 1 Clayton Brown, 1,625 ft. N. of most easterly SW cor. of survey, William M. Coffey Sur. ..... Derrick.
Leonard's (Tucker-Fullwood) No. 1 P. M. Staggers, 450 ft. from N line and 150 ft. from E line of 65-5-ac. tract, J. D. Nelson Sur. ..... S.D. 3,672 ft.

POLK COUNTY

Cannon et al's No. 1 Roberts, 10 miles N of Livinston, Romera Sur. ..... Rig up and shut down.

RED RIVER COUNTY

Concord Oil Co.'s No. 1 J. R. Dallahunty, 500 ft. from N of Isaac Moore Sur. and 200 ft. E of E line of Robert Glass Sur. ..... S.D. 2,606 ft.

ROCKWALL COUNTY

Bucanner Oil Co.'s No. 1 H. L. Lofland, center of 69-ac. tract in W. M. Bird Sur. ..... Set 10-in. csg. 130 ft.

RUSK COUNTY

Arrow Refining Co.'s No. 1 Town Heirs, 150 ft. S and 50 ft. W of Arrow Refining Co.'s No. 3 Thrash, F. Cordova Sur. ..... Drlg. 3,250 ft.
Barnsdall Oil Co.'s No. 2 Gill, 302 ft. from N line and 330 ft. from W line of lease, R. W. Smith Sur. ..... Rig up.
Big Indian Oil Co.'s No. 1 Joe Lee, 172 ft. from S line and 990 ft. from W line of 24-ac. lease, Peter Tipps Sur. ..... Drlg. 3,520 ft.
Boggs et al's No. 1 J. Border, 280 ft. S of Wyche's No. 1 Arnold on 5-ac. lease, P. W. Holmes Sur. ..... Drlg. 3,699 ft.
Brooks Petroleum Co.'s No. 1 Mayfield, Daniel Clark Sur. ..... Top sand 3,622 ft.; waiting on standard rig; would not flow; T.D. 3,702 ft.
T. E. Castle's No. 1 R. H. Gary estate, 3,960 ft. from N line and 5,280 ft. from W line of survey, 10 miles S of Henderson, A. Latham Sur. ..... Fishing 3,812 ft.
Cupp et al's No. 1 M. Clay, S offset to Fair and Thompson's No. 1 Freeman Wiley, Juan Ximenes Sur. ..... Waiting on cmt. to set; T.D. 3,-698 ft.
Daniels and Scott's No. 1 J. R. Irion, W offset to George Pipes' No. 1 Irion, John Womack Sur. ..... Drlg. 2,300 ft.
East Texas Loan & Investment Co.'s No. 2 Bradberry, 330 ft. from N and W lines of lease, R. W. Smith Sur. ..... Waiting on cmt. to set; T.D. 3,-650 ft.
G. W. Eaton's No. 1 fee, 150 ft. E and midway between Weissman's No. 2 Brightwell, R. W. Smith Sur. .... Drlg. 2,440 ft.
Gillen et al's No. 2 Brightwell, S offset to Oliver and Spaldin's No. 1 Brightwell, R. W. Smith Sur. ..... Drlg. 2,600 ft.
J. Guinn's No. 1 Neal Cooper, center of Blk. No. 36, T. J. Moore Sur. ..... Waiting on standard rig; T.D. 3,660 ft.
Gulf Production Co.'s No. 1 Hosen Baton, 1,210 ft. W and 330 ft. S of NE cor. of lease, Mary Cogswell Sur. ..... Drlg. 3,425 ft.
Gulf Production Co.'s No. 1 Wittle Oten, 330 ft. from S and W lines of 50-ac. lease, M. McCabe Sur. ..... Waiting on cmt. to set; T.D. 3,-732 ft.
Harris and Russell's No. 1 T. W. Harris, 330 ft. from S line and 660 ft. from W line of most southerly SW cor. of 160-ac. tract, 3 miles SW of Henderson, W. G. Davis Sur. ..... Derrick.
Hasting and Dodson's No. 1 E. B. S. Florey, 257 ft. from S line and 287 ft. from E line of 25-ac. lease, P. W. Holmes Sur. ..... Fishing; T.D. 3,588 ft.
Hathaway et al's No. 1 Gray, J. M. McLain Sur. ..... T.D. 3,865 ft. (corrected).
Heiden-Rodgerson et al's No. 1 Barton and Birdwell, N offset to Reisinger et al's No. 1 Barton, W. G. Tutt Sur. ..... T.D. 3,792 ft.
Humble Oil & Refining Co.'s No. 2 Amanda Simmons, 325 ft. from W line and 750 ft. from S line of lease, W. H. Bears Sur. ..... Prepare to test; T.D. 3,804 ft.
Iotex Oil Co.'s No. 2 Tom Beall, 330 ft. from S and E lines of lease, P. W. Holmes Sur. ..... Drlg. 3,000 ft.
J. Jeagen's No. 1 Needham, 330 ft. from N line of lease and 330 ft. from NE and 400 ft. from SE of survey, J. H. Chambers Sur. ..... S.D. 1,414 ft.
C. H. Lyons' No. 1 W. Moore, 330 ft. from N and W lines of lease, M. V. Pena Sur. ..... T.D. 3,633 ft.; S.D.
McMahon and McCulloch's No. 1 Joe Lee, 2,323 ft. from E line and midway between N and S lines of lease, Peter Tipps Sur. ..... Drlg. 2,700 ft.
John Menke's No. 1 C. F. Bradbury, 330 ft. from S and E lines of lease, W. R. Cooke Sur. ..... Rig up.
R. S. Monroe's No. 1 Daisy Bradford, 330 ft. N and E of NE cor. of Blk. No. 8 of Hunt's Bradford lease, Juan Ximenes Sur. ..... Rig up.
Paulett et al's No. 1 Ed Sparks, 350 ft. from E, 150 ft. from S of survey, L. C. Riggs Sur. ..... S.D. 1,465 ft.
Roger Bros.' No. 1 M. A. Thrash, 103 ft. from N and S lines, 233 ft. from W line and 267 ft. from E line of 4-ac. lease, F. Cordova Sur. ..... Top sand 3,720 ft.; S.D. 3,750 ft.
Ross Seward's No. 1 Burton, J. J. Y'Barbo Sur. ..... T.D. 3,387 ft.
Fred Shields and Florence Oil Co.'s No. 1 R. L. Buckner, 330 ft. from N and W lines of 320-ac. tract and survey, John E. Davis Sur. ..... Drlg. 3,308 ft.
Smith and Sikes' No. 1 Frederick, 160 ft. S of SE cor. of E. D. Oil Co.'s Alford lease, I. G. Parker Sur. ..... Waiting on cmt. to set; T.D. 3,685 ft.
Stewart and Duffy's No. 1 Solar Jackson, 330 ft. from N and E lines of lease, P. W. Holmes Sur. ..... S.D. 100 ft.
Sun Oil Co.'s No. 1 J. P. Seale, 330 ft. from N and E lines of 142-ac. lease, J. Vargas Sur. ..... Location.
M. M. Travis' No. 1 J. Horton, 330 ft. from S and W lines of lease, J. S. Barnett Sur. ..... Drlg. 3,155 ft.
Unacre Oil Co.'s No. 2 Thrash, 330 ft. from N line and center of E and W lines of 10-ac. lease, Juan Ximenes Sur. ..... Drlg. 1,320 ft.
Winn et al's No. 1 Brightwell, W offset to Gillen's No. 2 Brightwell, R. W. Smith Sur. ..... Drlg. 2,440 ft.
Fox Wood et al's No. 1 L. Morris, center of 1-ac. lease, George Cooper Sur. ..... Waiting on cmt. to set; T.D. 3,-651 ft.

SMITH COUNTY

Boucher-Owen and McCulloch's No. 1 Beulah Means, 2,775 ft. from S line and 330 ft. from E line of lease, E. Daniels Sur. ..... S.D. 1,300 ft.
Cockburn and Hooker's No. 3 Lula Jackson, 330 ft. from S and E lines of 76-ac. lease, E. Daniels Sur. .... Rig up and S.D.
Golden Eagle Oil Co.'s No. 1 T. B. Collier, 137 ft. from S line and 150 ft. from E line of lease, J. Jordan Sur. ..... Derrick.
Golden Eagle Oil Co.'s No. 1 E. E. Moore, 330 ft. from N and E lines of 8-ac. lease, Juan Vargus Sur. ..... Derrick.
W. T. Graham's No. 1 Cooke, 400 ft. N and 36 ft. W of SW cor. of Sinclair Prairie's Dora Wright 162.2-ac. tract, Juan Vargas Sur. ..... Derrick.
Hooper et al's No. 1 Lula Jackson, 330 ft. S and 530 ft. E of most northerly SW cor. of Monroe Shell Robinson lease, E. Daniels Sur. ..... S.D. 3,815 ft.
Joiner et al's No. 1 C. S. Jackson ..... T.D. 4,045 ft.; S.D.; prepare to abnd.
K. O. T. Oil Co.'s No. 2 S. S. Cooke, 330 ft. from N line and center of E and W lines of lease, J. Jordan Sur. ..... Testing 3,721 ft.
Alex McCutchin's No. 1 Jessie Cole, 108 ft. from S line and 110 ft. from E line of 1.27-ac. lease, J. Jordan Sur. ..... Derrick.
McRabie et al's No. 1 C. P. Hamilton, 330 ft. from S and E lines of 255-ac. tract, Jackson Rector Sur. .. Rig up and S.D.
Mundt et al's No. 1 W. E. Murray, 330 ft. from S and E lines of lease, 5 miles SE of Tyler, Marshall Wynn Sur. ..... Drlg. 4,680 ft.
Sun Oil Co.'s No. 12 O. W. Knight, 1,640 ft. from S line and 2,000 ft. from E line of lease, D. Collins Sur. ..... Drlg. 3,621 ft.
Sun Oil Co.'s No. 13 O. W. Knight, between No. 4 and No. 12 and 831 ft. W of No. 4, D. Collins Sur. ..... Derrick.
The Texas Company's No. 6-B Jarvis, 2,310 ft. S and 330 ft. E of NW cor. of lease, M. D. L. S. Coy Sur. ..... Drlg. 640 ft.
Ed Wallace et al's No. 1 Jessie Cole, 150 ft. from S line of lease and due W offset to Smith's No. 1 Cole on 10-ac. lease, J. Jordan Sur. ..... Fishing for bit; T.D. 2,894 ft.

Weaver Crim Oil Co.'s No. 3 T. Stone fee, 330 ft. from S line and E offset to Monroe's No. 1 Robinson, D. Shaw Sur. ..... Derrick.

TITUS COUNTY

Perry V. Cook's No. 1 M. C. Rogers, center of SW of Moore Sur. ..... T.D. 4,212 ft.

UPSHUR COUNTY

Cranfill & Reynolds' No. 1 H. M. and B. B. Berry, 935 ft. from N line and 2,000 ft. from W line of survey, J. P. Hutchinson Sur. ..... Derrick.

J. P. Evans et al's No. 1 Bell, 700 ft. from N line and 900 ft. from E line of 60-ac. lease, William Fadden Sur. ..... Reaming; T.D. 3,485 ft.

Everetts Oil Co.'s No. 4 A. J. Sanders, 330 ft. from S and W lines of lease, T. Allen Sur. ..... Derrick.

Lewis Godlin's No. 2 J. T. Mackey, 660 ft. SW of No. 1 and 330 ft. NW of highway ..... S.D. 2,700 ft.

Pat Hudson et al's No. 1 D. F. Smith, 330 ft. out of SE cor. of W 100 acres of the N 200 acres of the 272-ac. lease, 3 miles E and 1½ miles N of Cranfill & Reynolds' No. 1 Rash, John Denson Sur. ..... Waiting orders 3,710 ft.

J. C. Kerby and Refugio's No. 1 Ben H. Reed, 262 ft. from S line and 845 ft. from E line of 189-ac. tract.. Location.

Maddox Development Co.'s No. 1 D. A. Fleet, 130 ft. from N and E lines of survey, I. N. Stephens Sur.... S.D. 2,730 ft.

T. C. McKinney's No. 2 E. H. Brawley, 330 ft. from S and E lines of lease, William King Sur. ..... Rig up.

M. L. Stevens et al's No. 1 J. Hargroves, 330 ft. from S line and center of E and W lines of lease, M. Mann Sur. ..... Rig up.

The Texas Company's No. 2 Williams, 330 ft. from S and E lines of survey, J. Crouch Sur. ..... Running tubing; T.D. 3,697 ft.

Tucker and Van Flech's No. 1 S. J. Mangham, 1,320 ft. E and 640 ft. S of SW cor. of M. Ward survey, 2 miles E of Gilmer, J. J. Hooper Sur. ..... Derrick.

Turnbow's No. 1 D. C. Shelton, center of 2½-ac. tract, Wm. King Sur. ..... Derrick.

Twin Oil Co.'s No. 2 C. J. Mackey, 330 ft. from S line of lease and 660 ft. W of No. 1, J. M. Pineda Sur. ..... Rig up.

R. H. Vice et al's No. 1 L. Graves, 330 ft. from S and W lines of 106-ac. lease, M. Irwin Sur. ..... S.D. 2,910 ft.

Wadley and Evans' No. 1 W. S. Jones, 330 ft. from S and E lines of 100-ac. lease, James M. Dunn Sur. ... S.D. 3,690 ft.

Watson's (formerly Kinsey) No. 1 D. F. Smith, 466 ft. from S line and 1,165 ft. from E line of 266-ac. tract, J. R. Davis Sur. ..... S.D. 1,856 ft.

VAN ZANDT COUNTY

Barton et al's No. 1 C. L. Hubbard, 600 ft. out of NE cor. of Hubbard 225-ac. tract, 3½ miles S of Canton, M. J. De Cadena Sur. ..... Coring 2,596 ft.

Kelly O. & G. Co.'s No. 1 Lemsford, center of Lemsford tract, John Conner Sur. ..... S.D. 2,300 ft.

Lyman et al's No. 1 J. C. Stewart, 150 ft. from N line and 650 ft. from W line of 90-ac. tract, A. McPhail Sur. ..... Drlg. 2,731 ft.

Pure Oil Co.'s No. 6 R. E. Cade, 225 ft. W of E line and 225 ft. N of S line of lease, A. McPhail Sur. .... Derrick.

Pure Oil Co.'s No. 2 Sam Allen, 200 ft. S of N line and 225 ft. E of W line of lease, J. Prado Sur. ..... Location.

Pure Oil Co.'s No. 2 R. A. Enas, 150 ft. S of N line and 225 ft. E of W line of lease, Jackson Thomas Sur..... Location.

Pure Oil Co.'s No. 2 A. D. Clark, 225 ft. S of N line and 218 ft. E of W line of lease, A. H. Wiley Sur. ..... Testing 2,922 ft.

Pure Oil Co.'s No. 4 A. R. Humphreys, 1,125 ft. W of E line and 225 ft. S of N line of lease, A. McPhail Sur. ..... Cmt. setting 2,821 ft.

Pure Oil Co.'s No. 8 W. F. Swain, 250 ft. S of N line and 250 ft. W of E line of W. F. Swain 40-ac. tract in John Walling Sur. ..... Set surface csg. 298 ft.

Pure Oil Co.'s No. 4 H. P. Tunnell, 225 ft. W of E line and 150 ft. N of S line of lease, James Rose Sur. ..... Testing 2,941 ft.

Pure Oil Co.'s No. 10 A. E. Tunnell, 250 ft. S of N line and 250 ft. W of E line of lease, John Walling Sur. ..... Cmt. setting 2,940 ft.

A. C. Rowan's No. 1 W. E. Price, 150 ft. from N line and 150 ft. from W line of 28-ac. tract, John Walling Sur. ..... S.D. 2,942 ft.

Roy Stumpff's No. 1 M. I. Riggs, 169 ft. from E line and 250 ft. from S line of tract No. 2 and 330 ft. from E line of lease, 4 miles NE of Van, William Daniel Sur. ..... Rig up and S.D.

Van Oil Association's No. 1 Tankersley, 200 ft. from E and 1,000 ft. from S of farm, L. Landers Sur. ..... T.D. 2,850 ft.

C. O. Weir's No. 1 W. B. Tunnell, 150 ft. from N and W lines of lease, A. H. Wiley Sur. ..... Location.

WOOD COUNTY

De Canther's No. 1 N. L. McLain, 350 ft. from N line and 642 ft. from E line of tract, Sam Brooks Sur..... S.D. 3,835 ft.

F. B. Parriott's No. 1 John G. Harvey, 200 ft. from N line and 2,801 ft. from W line of survey, 6 miles E of Quitman, Meredith H. Ussery Sur. ..... Shut down.

W. B. Saulsbury's No. 1 T. H. Peters, 600 ft. from S line and 200 ft. from E line of 320-ac. tract and survey, 4 miles E of Mineola, W. B. McNutt Sur. ..... S.D. 400 ft.

Talko Oil Co.'s No. 1 G. T. Ross, B. L. Smith Sur. ..... Fishing 3,840 ft.

Wood County Dev. Co.'s No. 1 Davis, approximately 180 ft. from S line of 160-ac. tract and 2¼ miles S of Kantos in Sarah McDonald Sur. ..... Drlg. 3,285 ft.

Wildcat Operations in West Texas

(Continued from Page 39)

Green O. & R. Co.'s No. 1 Denman, 990 ft. from S and 2,310 ft. from W, Sec. 14, Blk. 30, Twp. 1s, T.&P. Sur.. Spudded and S.D.

Myers et al's No. 1 Denman, 2,305 ft. from S and 2,320 ft. from E Sec. 14, Blk. 30, Twp. 1s, T.&P. Sur. .... Drlg. 1,325 ft.

Mid-Continent Oil & Gas Co.'s No. 1 Denman, 990 ft. from S and 330 ft. from E Sec. 10, Blk. 30, Twp. 1s, T.&P. Sur. ..... Drlg. 1,396 ft.

Sinclair-Prairie Oil Co.'s No. 2 Dodge, 1,650 ft. from S and 429 ft. from W, Sec. 11, Blk. 30, Twp. 1s, T.&P... T.D. 2,765 ft.; swabbed 124 bbls. in 4 days.

HUDSPETH COUNTY

Patillo-Welsh's No. 1 Briggs ..... Drlg. 1,165 ft.

IRION COUNTY

Stanolind Oil & Gas Co.'s No. 1 Williams, 1,320 ft. from S and E of Sec. 1,196, T.T.R.R. Sur. ..... S.D. 6,519 ft.; plugging.

Straughn et al's No. 1 Kaiser, 1,980 ft. from N and 1,320 ft. from W, Sec. 69, H. Cooper Sur. ..... Drlg. 400 ft.

JONES COUNTY

Abers et al's No. 1 Burton, 150 ft. from S and 175 ft. from E of 43.4-acre tract in G. Martinez Sur. ..... S.D. 1,005 ft.; temp. aband

Condor Pet. Co.'s No. 1 Sayles, 650 ft. from N and 300 ft. from W Sec. 3, Blk. 20, T.&P. Sur. ..... Location.

Croft et al's No. 2 Swann, 4,350 ft. from S and 1,700 ft. from E, I. Miley Sur. No. 280 ..... Location.

Johnson's No. 1 Huddleston, 165 ft. from S and W of N half of N half of Sec. 39, Blk. 18, T.&P. Sur. ..... Drlg. 1,570 ft.

Pope & Anderson's No. 2 Swann, 3,050 ft. from S and 1,120 ft. from E of I. Miley Sur. ..... Drlg. 1,320 ft.

Smart & Reynolds' No. 1 Reynolds, 2,500 ft. from N and 150 ft. from W, Sec. 3, W. T. Scott Sur. No. 3.. Drlg. 735 ft.

C. S. Spelling et al's No. 1 Lillie, 200 ft. from N and W Sec. 4, E. Miller Sur. No. 2 ..... S.D. 2,030 ft.

Southern Oil Co.'s No. 1 Swann, 1,000 ft. from E and 900 ft. from S of I. Miley Sur. ..... Rig.

Young et al's No. 1 Harrell, 150 ft. from S and E of N half of Sec. 8, O.A.L. Sur. ..... Location

LOVING COUNTY

Adams et al's No. 1 Reagan-McElvain, 2,310 ft. from NW and 1,650 ft. from NE Sec. 34, Blk. 1, W.&N.W. Sur. ..... Drlg. 1,243 ft.

Columbia Oil & Gas Co.'s No. 2 Wheat, 2,310 ft. from NW and 330 ft. from SW Sec. 85, Blk. 1, W.&N.W. Sur. ..... Drlg. 2,688 ft.

Eppenauer Drlg. Co.'s No. 1 Victor, 2,310 ft. from NE and 330 ft. from SE Sec. 4, Blk. 2, W.&N.W. Sur. ... S.D. 4,125 ft.

Goldman et al's No. 1 Allen, 330 ft. from NE and NW of Sec. 90, Blk. 1, W.&N.W. Sur. ..... S.D. 3,308 ft

Goldman et al's No. 2 Allen, 330 ft. from NW, 2,310 ft. from SW, Sec. 90, Blk. 1, W.&N.W. Sur. ..... Shut down.

Goldman et al's No. 1 Reagan-McElvain, 330 ft. from NE, 2,310 ft. from NW, Sec. 84, Blk. 1, W.&N.W. Sur.. Shut down.

Lewis & Siegel's No. 1 Johnson, 330 ft. from N and 1,650 ft. from W, Sec. 6, Blk. 56, Twp. 1, T.&P. Sur... S.D. 2,280 ft.

Martin et al's No. 1 Wheat, 990 ft. from SW and SE, Sec. 83, Blk. 1, W.&N.W. Sur. ..... Drlg. 1,346 ft.

Martin's No. 2 Freels, 4,175 ft. from NE and 412 ft. from NW, Sec. 92, Blk. 1, W.&N.W. Sur. ..... Location.

Miller et al's No. 1 Ferguson, 990 ft. from NE of Sec. 44, Blk. 29 ..... Spudded and S.D.

Thomas' No. 1 Wheat, 2,310 ft. from NW, 990 ft. from NE, Sec. 83, Blk. 1, W.&N.W. Sur. ..... S.D. 3,970 ft.

Trinity Drlg. Co.'s No. 1 Wheat, 2,310 ft. from SW, 330 ft. from SE, Sec. 3, Blk. 2, W.&N.W. Sur. ..... S.D. 1,300 ft

MENARD COUNTY

Priest's No. 1 Sorrel, 1,000 ft. from E and 200 ft. from S cor., Sec. 132, E.L.R.R. Sur. ..... S.D. 2,360 ft.

PECOS COUNTY

Aero Oil & Gas Co.'s No. 3 Byrne, 2,430 ft. from NW and 1,485 ft. from SW, Sec. 54, Blk. 10, H.&G.N. Sur... Drlg. 1,280 ft.

Cardinal Oil Co.'s No. 3-G Tippett, 660 ft. from S and 330 ft. from E of No. 2 Tippett, Sec. 61, Blk. 194, G.C.&S.F. Sur. ..... Location.

Corvette Oil Corp.'s No. 8 H. Monroe, 1,040 ft. from E line and 150 ft. from N line of Sec. 39, G.C.&S.F. Sur., Blk. 194 ..... Location

Kane Prod. Co.'s No. 1 Pecos Valley, 330 ft. from NW and 1,650 ft. from SW, Sec. 34, Blk. 3, H.&T.C. Sur... Drlg. 520 ft.

Messinger et al's No. 1 Jones, 1,200 ft. from NW, 1,290 ft. from SW, Sec. 5, Blk. 9, H.&G.N. Sur. ..... S.D. 250 ft

PRESIDIO COUNTY

Sadler et al's No. 1 Bledsoe, 2,640 ft. from N and W Sec. 15, Blk. 354, G.C.&S.F. Sur. ..... S.D. 328 ft

REAGAN COUNTY

Big Lake Oil Co.'s No. 7-C University, 1,670 ft. from W and 725 ft. from S, Sec. 25, Blk. 9 ..... T.D. 8,825 ft.; producing; 851 bbls. oil and 9,000,000 ft. gas.

Big Lake Oil Co.'s No. 8-C University, 710 ft. from S and 2,410 ft. from E, Sec. 13, Blk. 2 ..... Drlg. 3,528 ft.

Big Lake Oil Co.'s No. 9-C University, 2,410 ft. from N and 765 ft. from E, Sec. 12, Blk. 2 ..... Drlg. 1,010 ft.

Big Lake Oil Co.'s No. 181 University, 1,700 ft. from S and 2,000 ft. from W, Sec. 10, Blk. 2 ..... Drlg. 2,245 ft.

Continental Oil Co.'s No. 6-B University, 765 ft. from N and 1,980 ft. from W, Sec. 36, Blk. 9 ..... T.D. 3,188 ft.; drlg. by pipe.

Group Oil Corp.'s No. 5-B University, 2,700 ft. from S and 1,775 ft. from W, Sec. 36, Blk. 9 ..... Drlg. 8,505 ft.

REEVES COUNTY

F. McDorman et al's No. 1 Ray Roberts et al, 2,310 ft. from S and E lines of Sec. 22, Blk. 59, P.S.L. Sur. ... S.D. 2,025 ft

Southern Star Oil Co.'s No. 1 Wright, 1,320 ft. from S and W, Sec. 58, Cassel's Sur. ..... S.D. 250 ft

RUNNELS COUNTY

Blue Bonnett Oil Co.'s No. 1 McMillan, 1,368 ft. from N and 660 ft. from W, Sec. 22, N. Travis Sur. ..... T.D. 3,532 ft.; T.P. 3,530 ft.; flowing 80 bbls. daily.

Dutton et al's No. 1 Dean, 5,475 ft. from NE and 1,048 ft. from NW in J. Heil Sur. No. 519 ..... S.O. 3,417-20 ft; S.D. 3,600 ft.

SCHLEICHER COUNTY

Eastland Oil Co.'s No. 1 Joe Tisdale, C Sec. 29, Blk. M, G.H.&S.A. Sur. ..... T.D. 5,410 ft

Wesner et al's No. 1 Nicks, 2,310 ft. from N and 2,302 ft. from E of Sec. 77, Blk. LL, T.C. Sur. ..... S.D. 5,580 ft

George Wilson's No. 1 Page, Sec. 40, Blk. L, 1,290 ft. from N, 1,570 ft. from W, G.H.&S.A. Sur. ..... S.D. 5,053 ft

SCURRY COUNTY

G. E. Dickman et al's No. 1 F. C. Davis, 1,000 ft. N and 1,770 ft. W of SE cor. of Sec. 275, Blk. 2, E.&T.C. Sur. ..... S.D. 5,100 ft

Meinzleman et al's No. 1 Hood, 436 ft. from N and 489 ft. from E, Sec. 87, Blk. 3, H.&T.C. Sur. ..... Drlg. 425 ft.

Scurry County Oil Exchange's No. 1 Earnest, 2,310 ft. from N and W, Sec. 68, Blk. 3, H.&G.N. Sur. ..... Spudded and S.D.

Seifert & Dibble's No. 1 T. M. Blackburn, 2,310 ft. from N and 2,310 ft. from W line of Sec. 153, Blk. 97, H.&T.C. Sur. ..... S.D. 4,992 ft

TERRELL COUNTY

Big Bend Oil Co.'s No. 1 Bassett, C NW Sec. 155, Blk. D, M.-K.-T. Sur. ..... S.D. 3,369 ft

Keck Pecos Trust Co.'s No. 1 Hamilton, C Sec. 6, Georgetown Ry. Sur. ..... S.D. 3,150 ft.; moved off tools.

McPhee-Briggs' No. 1 Kern, 330 ft. from S and W Sec. 15, Blk. D-5, M.-K.-T. Sur. ..... S.D. 500 ft.

Miller Bros.' No. 1 Allison & Burke, C NW Sec. 10, Blk. 176, T.&P. Sur. ..... S.D. 120 ft.

Mid-Kansas Oil & Gas Co.'s No. 1 Goode, 2,152 ft. from E and 330 ft. from S, Sec. 26, Blk. 161, G.C.&S.F. Sur.. S.D. 6,130 ft

Jones et al's No. 1 Pankenham, C SE NW Sec. 43, Blk. B-2, C.C.S.D.&R.G.N.G. Sur. ..... S.D. 2,545 ft

Sides et al's No. 1 Phelps, 2,157 ft. from N and 2,483 ft. from W, Sec. 5, G. W. Hurley Sur. ..... S.D. 3,525 ft.

TOM GREEN COUNTY

Golding & Dutton's No. 1 Norsworthy, 1,640 ft. from S and 587 ft. from E of John McNeese Sur. ..... S.D. 760 ft.; S.O. and gas 725 ft.

Mintex Oil Co.'s No. 1 Campbell Est., 446 ft. from S and 630 ft. from W of Sec. 180, Dist. No. 11, S.P. Sur... S.D. 1,994 ft

Pratt & Hancock's No. 2 Lewis, 100 ft. N and 330 ft. E of most northerly SW cor. of Joshua S. Grant Sur. No. 3 ..... S.D. 300 ft

UPTON COUNTY

Clark-Cooper's No. 1 Lane, 2,310 ft. from N and 990 ft. from E Sec. 36, Blk. 1, M.-K.-T. Sur. ..... S.D. 2,270 ft.; 1,800 ft. oil in hole.

Hope Pet. Co.'s No. 2 Lane, 2,310 ft. from N, Sec. 36, Blk 1, M.K.&T. Sur. ..... T.D. 2,315 ft.; to test.

White's No. 1 Lane, 2,310 ft. from S and 990 ft. from E Sec. 36, Blk. 1, M.-K.-T. Sur. ..... S.D. 2,355 ft.; sulphur water at 2,355 ft.

VAL VERDE COUNTY

Veach et al's No. 1 J. P. Yoas, 1,300 ft. from the N line and E line of Sec. 31, Blk. 1, I.&G.N. Sur. ..... S.D. 400 ft.

J. O. Owens' No. 1 Mills, Sec. 128, Blk. 1, I.&G.N. Sur., elev 2,130 ft. ..... S.D. 6,780 ft.

WARD COUNTY

Abell Bros.' No. 4 Smith, 990 ft. from SE and 285 ft. from NE of C of Sec. 4, Blk. 34, H.&T.C. Sur. ..... T.D. 1,025 ft.; underreaming csg.

Abell Bros.' No. 1 Hayzlett, 1,650 ft. from NW and 1,320 ft. from SW, Sec. 13, Blk. 5, H.&T.C. Sur. ..... Rigging up.

Atlantic Oil Prod. Co.'s No. 2 Barrow, 1,650 ft. from NE and 330 ft. from NW Sec. 22, Blk. 5, H.&T.C. Sur.... S.D. 2,526 ft.; cleaning out.

Gerber O. & G. Co.'s No. 1 Stubbs, 330 ft. from S, 990 ft. from W, Sec. 9, Blk. 3, B.&B. Sur. ..... Cellar

Atlantic Oil Prod. Co.'s No. 1 Blank-Camp, 1,320 ft. from NW and SW Sec. 14, Blk. 34, H.&T.C. Sur. ....Drlg. 125 ft.
Barnsdall Oil Co.'s No. 3 Henry, 330 ft. from NE and 1,650 ft. from SE, Sec. 28, Blk. 29 ....Drlg. 652 ft.
Bentley et al's No 1 Carson, 1,650 ft. from NE and SE Sec. 26, Blk. 5, H.&T.C. Sur. ....Rigging up.
Bradford's No. 1 Carson, 1,650 ft. from SE and 990 ft. from NE Sec. 26 ....Rigging up.
Bundy et al's No. 1 Bennett, 2,310 ft. from NW and SW Sec. 16, Blk. 34, H.&T.C. Sur. ....S.D. 160 ft.
Caprito et al's No. 1 Beatty, 330 ft. from SW and 990 ft. from SE, Sec. 3, Blk. 34, H.&T.C. Sur. ....S.D. 2,500 ft.
Eastland Oil Co.'s No. 3 Weiss, 954 ft. from NW and 284 ft. from NE of Sec. 4, Blk. 34 ....Rigging up.
Eppenauer's No. 1 Purcell, 365 ft. from SW and 1,650 ft. from SE of Sec. 17, Blk. 14, H.&T.C. Sur. ....**T.D. 2,740 ft.**
E. V. Greer's No. 1 Carr, 150 ft. from NW and 510 ft. from SW, Sec. 12, Blk. 3, H.&T.C. Sur. ....**S.D. 2,323 ft.**
Gulf Prod. Co.'s No. 13 Hutchings, 3,347 ft. from N and 330 ft. from E, Sec. 5, Blk. F ....Drlg. 2,468 ft.
Gulf Prod. Co.'s No. 14 Hutchings, 330 ft. from N and W of Sec. 9, Blk. O ....Rigged up rotary.
Gulf Prod. Co.'s No. 23 O'Brien, 330 ft. from N and 990 ft. from E Sec. 18, Blk. F ....Drlg. 300 ft.
Gulf Prod. Co.'s No. 24 O'Brien, 330 ft. from N and 990 ft. from W Sec. 19, Blk. F ....Cellar.
Gulf Prod. Co.'s No. 25 O'Brien, 330 ft. from N and W Sec. 20, Blk. F ....Cellar.
Kregle et al's No. 1 Heasler, 3,062 ft. from SE, 330 ft. from NE, Sec. 46, Blk. 34, H.&T.C. Sur. ....Fishing 1,910 ft.
Landreth Prod. Co.'s No. 1 Barker, 330 ft. from NW, 437 ft. from NE, Sec. 27, Blk. B-29, P.S.L. Sur. .... S.D. 2,407 ft.; running tubing.
Leidecker et al's No. 2 Bennett, 2,310 ft. from NW and 1,650 ft. from NE, Sec. 16, Blk. 34 ....Rigging up machine.
Maxwell's No. 1 Brillhart, 2,310 ft. from NE and SE Sec. 13, Blk. 34, H.&T.C. Sur. ....T.D. 2,473 ft.; flowing 75 bbls. day.
S. F. Owen's No. 1 Lee, 1,344 ft. from NW and 4,632 ft. from SW, Sec. 1, J. Howe Sur. ....Drlg. 2,610 ft.
Penn Oil Co.'s No. 1 York, 2,310 ft. from NW and SW Sec. 10, Blk. 34, H.&T.C. Sur. ....S.D. 2,455 ft.; 120 bbls. day.
Penn Oil Co.'s No. 1 Hardage-Wilson, 330 ft. from NE and SE Sec. 11, Blk. 34, H.&T.C. Sur. ....Shut down.
Reeter Oil Co.'a No. 1 Monroe, 660 ft. from NE and SE, Sec. 62, Blk. 33, H.&T.C. Sur. ....S.D. 2,150 ft.
Sixford-Puglarr's No. 1 London, 660 ft. N., 330 ft. NE E cor. Sec. 10, Blk. 33, H.&T.C. Sur., but in Sec. 8 ....S.D. 2,291 ft.
Stanolind Oil & Gas Co.'s No. 2 Weiss, 330 ft. from SW and 1,810 ft. from SE, Sec. 4, Blk. 34, H.&T.C. Sur. S.D. 2,348 ft.
Stanolind Oil & Gas Co.'s No. 3 Weiss, 1,118 ft. from SW and 1,810 ft. from SE Sec. 4, Blk. 34, H.&T.C. Sur. . T.D. 2,368 ft.; to run tubing.
Stanolind Oil & Gas Co.'s No. 1 Grimes, 1,485 ft. from NE and 2,112 ft. from SE, Sec. 14, Blk. 34 ....Drlg. 768 ft.
Sturm et al's No. 4 Jones, 2,310 ft. from SW and 990 ft. from SE Sec. 25, Blk. B-29, P.S.L. Sur. ....Drlg. 568 ft.
T. P. Coal & Oil Co.'s No. 5 James, 330 ft. from NE and 1,810 ft. from SE Sec. 5, Blk. 34, E.&T.C. Sur. .. . Drlg. 2,005 ft.
Thomas et al's No. 1 Bennett, 2,310 ft. from NE and SE, Sec. 16, Blk. 34, E.&T.C. Sur. .... T.D. 2,550 ft.; flowing 100 bbls. day.
Thompson's No. 1 Johnson, 2,310 ft. from SW and 330 ft. from NW, Sec. 9, Blk. 34, H.&T.C. Sur. ....Drlg. 1,612 ft.
Weekly Oil Corp. and L. E. Hults' No. 1 Burks, 330 ft. from SE and 1,980 ft. from SW, Sec. 26, Blk. B-29, P.S.L. Sur. ....Drlg. 2,455 ft.
Zoch et al's No. 1 Brillhart, 2,310 ft. from SE and SW, Sec. 13, Blk. 34, H.&T.C. Sur. ....Location.

WINKLER COUNTY

Richardson et al's Scarborough, 990 ft. from N and W Sec. 1, Blk. 77 ....Ready to spud.
Richardson et al's No. 1 Scarborough, 990 ft. from N and 1,650 ft. from W, Sec. 1, Blk. 77 ....Shut down.
Gid Richardson et al's No. 2 Sealy estate, 1,650 ft. from S and 330 ft. from W, Sec. 94, Blk. A, G.M.M.B.&A. Sur. ....S.D. 2,378 ft.
Richardson et al's No. 3 Scarborough, 1,980 ft. from S and 660 ft. from W, Sec. 1, Blk. 77, P.S.L. Sur. ....Drlg. 1,425 ft.

Wildcat Operations in Texas Panhandle

Week Ending October 31

CARSON COUNTY

Company, well, farm name, section and block—	Remarks:
Gulf Prod. Co.'s No. 6 Cooper, 330 ft. from N and W SW, Sec. 4, Blk. 9, I.&G.N. Sur.	Drlg. 2,160 ft.
H. A. M. Oil Co.'s No. 3 Cooper, 990 ft. from S, 330 ft. from W of E half NE, Sec. 5, Blk. 9, I.&G.N. Sur.	Drlg. 758 ft.
Osborne's No. 1 Byrum, 330 ft. from N and E, N½ NW, Sec. 188, Blk. 3, I.&G.N. Sur.	T.P. 3,081 ft.; Drlg. 3,260 ft.
Sinclair Prairie Oil Co.'s No. 1 Cooper, 330 ft. from S and W, Sec. 4, Blk. 9, I.&G.N. Sur.	Drlg. 2,067 ft.
Skelly Oil Co.'s No. 20 W. Schaffer, 1,320 ft. from S and E, Sec. 87, Blk. 4, I.&G.N. Sur.	Standardizing 2,206 ft.
Skelly Oil Co.'s No. 21 West Schaffer, 1,320 ft. N and E, Sec. 65, Blk. 4, I.&G.N. Sur.	Bldg. derrick.
Stubblefield-Shell's No. 3 Cooper, 330 ft. from N and 330 ft. from E of SE, Sec. 5, Blk. 9, I.&G.N. Sur.	**Cellar.**
Texoma Nat. Gas Co.'s No. 1-T Urbanczyk, center SE, Sec. 25, Blk. 4, I.&G.N. Sur.	Drlg. 2,200 ft.
Texoma Nat. Gas Co.'s No. 1-G Urbanczyk, 1,333 ft. S. 2,653 ft. E S half, Sec. 19, Blk. 4, I.&G.N. Sur.	Rigging up rotary.
The Texas Co.'s No. 1 Byrum, 330 ft. from N and W, S half NW, Sec. 188, Blk. 3, I.&G.N. Sur.	Standardizing 2,992 ft.

CHILDRESS COUNTY

Robertson's No. 1 Biddy, center S 26½ acres of N, Laughlin Sur. Blk. T	**Rig.**

COLLINGSWORTH COUNTY

Cochran Bros.' No. 1 Atkinson, 660 ft. from N and E, Sec. 34, Blk. 31, H.&G.N. Sur.	**Spudded.**
Kates et al's No. 1 Hickman, center NE, Sec. 45, Blk. 10, H.&G.N. Sur.	S.D. 1,750 ft.
Kates et al's No. 1 Bell, 330 ft. from N, 2,310 ft. from W, Sec. 21, Blk. 102, H.&G.N. Sur.	**S.D. 1,340 ft.; elevation 1,910 ft.**

COTTLE COUNTY

Darby Pet. Co. et al's No. 1 Puersil, 330 ft. from N, 1,320 ft. from E, Sec. 40, Blk. B, John H. Stevens Sur.	T.D. 3,860 ft.; underreaming 8-in. csg.

DEAF SMITH COUNTY

Western Union Oil Co.'s No. 1 Farwell, C NW, Sec. 13-2n-2e	**S.D. 1,240 ft**

GRAY COUNTY

Back & Barber's No. 1 Back, 660 ft. from S, 330 ft. from W, Sec. 140, Blk. 35, H.&G.N. Sur.	**S.D. 2,428 ft**
Baldridge et al's No. 1 Melton, 330 ft. from NE E half NE, Sec. 95, Blk. B-3, H.&G.N. Sur.	Drlg. 2,065 ft.
Baldridge et al's No. 1 Catlin, 330 ft. S and E of E 80 of 158-ac. tract, Sec. 57, Blk. 3, I.&G.N. Sur.	Location.
Boyce et al's No. 1 Colebank-Morse, 330 ft. NE, Sec. 45, Blk. 25, H.&G.N. Sur.	S.D. 2,554 ft.; shot 50 qts.; no results.
Christy's No. 1 Gethings, 330 ft. from N and E, Sec. 13, Blk. A-9, H.&G.N. Sur.	Machine.
Dixon Creek Oil Co.'s No. 1 Chapman, 330 ft. from S and W, Sec. 69, Blk. 25, H.&G.N. Sur.	Show oil 2,712 ft.; Drlg. 2,750 ft.
Graham-Crue Hoover's No. 1 Barrett, 330 ft. from S and W, Sec. 130, Blk. 3, I.&G.N. Sur.	Drlg. 2,520 ft.
Gray County Prod. Co.'s No. 1 Huselby, 330 ft. from S and W, E½ NW, Sec. 55, Blk. 25, H.&G.N. Sur.	Location.
Kewanee O. & G. Co.'s No. 1-F Morse, 330 ft. from S and W, Sec. 3, Blk. 26	Show gas 2,350 ft.; S.D. 2,660 ft.
R. H. Locke's No. 1 McKnight, 1,320 ft. N and W, Sec. 178, Blk. B-2, H.&G.N. Sur.	Location.
Magnolia Pet. Co.'s No. 6 fee, 660 ft. from S and W. Sec. 14, Blk. 3, I.&G.N. Sur.	Drlg. 4,082 ft.
Magnolia Pet. Co.'s No. 7 fee, 660 ft. N and W SW, Sec. 14, Blk. 3, I.&G.N. Sur.	Drlg. 1,565 ft.
Mazda-Shell Pet. Corp.'s No. 3 Combs-Worley, 330 ft. from N and W NE, Sec. 35, Blk. 3, I.&G.N. Sur.	Cellar.
Mid-Kansas O. & G. Co.'s No. 2 Webb, 990 ft. from N, 330 ft. from W NE, Sec. 61, Blk. 25, H.&G.N. Sur.	Drlg. 987 ft.
Naboh Oil Co.'s No. 1-E Morse, 330 ft. from S and W, W½ SE, Sec. 67, Blk. 25, H.&G.N. Sur.	**Plugged back to 2,625 ft.**
Parton & Holt's No. 2 Morse, 330 ft. from W, 350 ft. from N, W½ SW, Sec. 5, Blk. 26, H.&G.N. Sur.	**S.D. 2,635 ft.**
Parton Holt's No. 3 Morse, 660 ft. from N and E of E half SW, Sec. 5, Blk. 26, H.&G.N. Sur.	Drlg. 2,465 ft.
Pulse-Shell's No. 1 Brown, 290 ft. from N, 350 ft. from E of NW, Sec. 138, Blk. 3, I.&G.N. Sur.	T.D. 2,563 ft.; underreaming 8-in. csg.
Quicksand Oil Co.'s No. 2 Chapman, 165 ft. N, 775 ft. from E of W 60 ac. of N½ NW, Sec. 69, Blk. 25, H.&G.N. Sur.	Bldg. derrick.
Richardson's No. 1 Wright, 330 ft. from S and W, Sec. 13, Blk. 3, I.&G.N. Sur.	**T.D. 2,750 ft.; standardizing.**
Saunders et al's No. 2 Sullivan, 822 ft. from W, 231 ft. from NE, 160 ft. S, 264 ac. of N½, Sec. 136, Blk. 3, I.&G.N. Sur.	Will plug back to 3,275 ft. and shoot.
Skelly Oil Co.'s No. 3 South Jackson, 330 ft. from N, 990 ft. from E, Sec. 88, Blk. B-2	**T.D. 2,970 ft.; standardizing.**
Skelly Oil Co.'s No. 7 Saunders, 330 ft. from N, 360 ft. from W, Sec. 4, Blk. 1, A.C.H.&B. Sur.	**T.D. 2,540 ft.; standardized.**
Skelly Oil Co.'s No. 8 Saunders, 990 ft. S, 1,200 ft. from W, Sec. 4, Blk. 1, A.C.H.&B. Sur.	Moving in rig.
Tarber's No. 2 Saunders, 330 ft. N and W, Sec. 3, Blk. 1, B.B.&S.F. Sur.	**Location**
Tedesco-Bell O. & G. Co.'s No. 3 Morse, 330 ft. from N and W N half SE, Sec. 1, Blk. 26, H.&G.N. Sur.	Drlg. 945 ft.
The Texas Co.'s No. 6 Davis, 1,610 ft. from N, 1,320 ft. from E, Sec. 8, Blk. 1, A.C.H.&B. Sur.	Spudded.
The Texas Co.'s No. 2 Frashier, 997 ft. N, 1,323 ft. from E, Sec. 162, Blk. 3, I.&G.N. Sur.	Rigging up rotary.
The Texas Co.'s No. 5 Shaw, 330 ft. from S and E, E half, Sec. 5, Blk. 1, A.C.H.&B. Sur.	Drlg. 2,315 ft.
The Texas Co.'s No. 1 Pope, 330 ft. from N and E of W half SE, Sec. 173, Blk. 3, I.&G.N. Sur.	T.D. 3,050 ft.; standardizing.
The Texas Co.'s No. 22 Saunders, 300 ft. S, 330 ft. from W SE, Sec. 4, Blk. 1, A.C.H.&B. Sur.	Drlg. 1,420 ft.
The Texas Co.'s No. 13 Williams, 300 ft. N, 330 ft. W NE, Sec. 7, Blk. 1, A.C.H.&B. Sur.	Drlg. 1,840 ft.
The Texas Co.'s No. 14 Williams, 330 ft. N, 370 ft. W, Sec. 7, Blk. 1, A.C.H.&B.	Rigging up rotary.
Tripplehorn Bros.' No. 1 Lovett, 330 ft. from N and W, Sec. 57, Blk. B-2, H.&G.N. Sur.	T.D. 3,157 ft.; cleaning out.
Weltzel Oil Co.'s No. 3 Morse, 330 ft. from S and E of N half NW, Sec. 67, Blk. 25, A.&G.N. Sur.	Drlg. 2,265 ft.

HEMPHILL COUNTY

Hoover's No. 1 Hoover, 350 ft. from N, 1,300 ft. from E, G. S. Hood Sur.	S.D. 5,165 ft.

HUTCHINSON COUNTY

Alexander's No. 1 Cockrell, 330 ft. N and E of E 80 of S 160, Sec. 3, Blk. M-2, T.C. Sur.	Location.
Base's No. 1 Moore, 330 ft. from S, 330 ft. from E, in 80 ac. in NW, Sec. 21, Blk. M-21, T.C.R.R. Sur.	**T.D. 3,080 ft.; estm. 5 or 10 bbls may plug.**
Danciger O. & R. Co.'s No. 1 Johnson, 330 ft. N and W, SE, Sec. 34, Blk. Y, A.&B. Sur.	**Spudded and S.D.**
Deal O. & G. Co.'s No. 2 Sanford, 330 ft. N and E of N 80 ac., S 160 ac., Sec. 81, Blk. 46, H.&T.C. Sur.	**S.D. 450 ft.**
Holmes & Newblock's No. 2 Moore-Langdon, 330 ft. from N and W, Sec. 125, Blk. 4, I.&G.N. Sur.	**S.D. for repairs 2,947 ft.**
Huber Pet. Co.'s No. 2 Christian, 330 ft. from S and E, SW, Sec. 33, Blk. Y, A.&B. Sur.	Drlg. 2,210 ft.
Huber Pet. Co.'s No. 1 Moyer-Johnson, 990 ft. from N, 330 ft. from E half SW, Sec. 34, Blk. Y, A.&B. Sur.	Drlg. 2,715 ft.
Huber Pet. Co.'s No. 1 Works, 2,530 ft. S, 660 ft. E, Sec. 7, Blk. Y-2, T.T. Sur.	Cellar.
Liner Drlg. Co.'s No. 1-D Johnson, 330 ft. from N and E, Sec. 6, Blk. 1, B.&B. Sur.	**Plugged back to 3,146 ft.; S.D**
Joe Murphy's No. 1 Watkins, 440 ft. from N and W of N half, Sec. 13, Blk. M-21	T.D. 2,117 ft.; underreaming 8-in. csg.
Oates & Morrow's No. 2 Starnes, 1,400 ft. from S, 680 ft. from E, Sec. 24, Blk. M-23, T.C.R.R. Sur.	S.D. 3,145 ft.; show oil and gas 3,100 ft.
Pharis Oil Co.'s No. 5 Smith, 660 ft. from N and W, SW, Sec. 14, Blk. Y, M.&C. Sur.	**Shut down.**
Stansylvania Oil Co.'s No. 3 Stansbury, 236 ft. from S, 1,264 ft. from W, Sec. 129, Blk. Z, E.L.&R.R. Sur.	T.D. 3,035 ft.; T.P. 2,975 ft.; estm. 50 bbls.
Steckol Prod. Co.'s No. 2-D Whittenburg, 1,065 ft. from S and W, Sec. 38, Blk. M-23, T.C. Sur.	Cellar.
Texilvania Oil Co.'s No. 1 Haile, 330 ft. S, 280 ft. W, Sec. 16, Blk. 1, E.L.R.R. Sur.	Rig.
Timms-Deatch's No. 4 Moore, 330 ft. N and W, Sec. 124, Blk. 4, I.&G.N. Sur.	T.D. 3,066 ft.; T.P. 3,023 ft.; shot 90 qts. 3,015-60 ft.; no test.

LIPSCOMB COUNTY

Okla. Public Service Co.'s No. 1 C. W. Jones, NE SW, Sec. 100, H.&T.C. Sur.	**T.D. 5,003 ft**

MOORE COUNTY

Canadian O. & G. Co.'s No. 2-A N. H. Reed, 200 ft. N of N line, Sec. 20, Blk. B-10, 200 ft. E of E line, Sec. 16, but in Sec. 47, Blk. 3, G.&M. Sur.	Rotary rig.
Dogie Oil Co.'s No. 1 Greenwald, 330 ft. from N and W, Sec. 277, Blk. 44, H.&T.C. Sur.	T.D. 1,150 ft.; fishing.
Shamrock Oil & Gas Co.'s No. 2 Brumley, 330 ft. from N and W, Sec. 360, Blk. 44, H.&T.C. Sur.	Fishing 3,000 ft.
Shamrock Oil & Gas Co.'s No. 1 Burnett, 660 ft. from S, 330 ft. from W, Sec. 359, Blk. 44, H.&T.C. Sur.	Drlg. 1,935 ft.

MOTLEY COUNTY

Matador Oil Corp.'s No. 1 Owens, C NE, Sec. 10, Blk. G, B.&B. Sur.	**S.D. 530 ft**

OLDHAM COUNTY

Amalgamated German-American Oil Corp.'s No. 1 Norton, 330 ft. S and E, Sec. 13, T.&N.O. Sur.	**S.D. 400 ft**
Chambers et al's No. 1 Herring, CNL, Sec. 20, Blk. S, G.C.&S.F. Sur.	T.D. 4,000 ft.; fishing.

ROBERTS COUNTY

Chicken Creek Oil Co.'s No. 1 Ledrick, 330 ft. N and W, Sec. 55, Blk. C, G.&M. Sur.	Drlg. 4,800 ft.
Travis et al's No. 1 Cunningham, 330 ft. S and W, Sec. 74, Blk. M-3, H.&G.N. Sur.	**S.D. 2,690 ft**

WHEELER COUNTY

Delaney et al's No. 1 Sitter, 330 ft. from S and W of E half NE, Sec. 33, Blk. 24	Drlg. 1,425 ft.
Devore & Robinson's No. 1 Sitter, 3,310 ft. from S and E, E½, Sec. 33, Blk. 24, H.&G.N. Sur.	**T.D. 2,760 ft.; S.D. for pipe line connection.**

Test Results Vary in New Osage County Field; Operators Advise New Proration Rules

By W. A. SPINNEY
Staff Correspondent, Oklahoma Fields

The discovery well in the Wentz Pool, in Noble County, Oklahoma, has made approximately 20,000 bbls. of oil to date and has also been plugged back after finding water in the Wilcox sand. The operation of the well has been taken over by the Shell Petroleum Corp. The well is No. 1 Wolff, C SE NW, Section 17-20-2w, a community wildcat which is believed to have opened a new Wilcox sand pool in southwestern Noble County. The well was drilled under the supervision of L. H. Wentz and is on a unitized block of 2,160 acres, with the Shell Petroleum Corp., Gypsy Oil Co., Sinclair Prairie Oil Co., L. H. Wentz, Carter Oil Co., Twin State Oil Co., Phillips Petroleum Co. and Empire Oil & Refining Co. owning interests in the well and block. The well has been plugged back from a total depth of 5,262 feet to 5,225 feet with cement after water had been found in the bottom of the hole. It is believed the water has been effectively shut off. The well was pinched in Saturday, October 29, and made only 411 bbls. of oil. The well is expected to be pinched to 50 bbls. a day under the Oklahoma proration laws which limit wildcat wells in the State to that amount.

The daily average production in the State for the week ending October 29 was estimated at 395,400 bbls. which is a decline of approximately 4,100 bbls. a day from the previous week when the average was 399,490 bbls. daily.

The third producing horizon was found in the Naval Reserve area of Osage County during the week. A. H. Kasishke, Inc.'s No. 1, SE cor. SW SE, Section 13-23-7, found the Burgess sand at 2,517-48 feet where oil rose 2,000 feet in the hole in two hours' time, and soon afterwards it had filled the hole. Drilling was halted until tankage was provided and arrangements made for a pipe line connection. The other producing horizons found in Naval Reserve were the Hominy sand and Siliceous lime.

Johnson Oil & Refining Co.'s No. 1, SE cor. NE, Section 11-23-7, missed all three producing sands and was being abandoned at a total depth of 2,929 feet in the Siliceous lime.

In the Holdenville Pool, in Hughes County, the Sovereign Oil Co.'s No. 1 Scott, NW cor. SW SW, Section 10-7-8, flowed between 35 and 50 bbls. of oil an hour from the Booch sand at 2,900-16 feet and was shut in for a pipe line connection.

New Discoveries in South

The wildcat well of A. E. Trowbridge and others, No. 1 Price, SE cor. NE NE Section 30-2-9w, Comanche County, is flowing at the rate of 4 to 5 bbls. an hour through tubing. It is estimated to be making around 100 bbls. daily. The pay was found in the granite wash at 2,050-80 feet and was drilled to a total depth of 2,110 feet.

A wildcat well in southern Jefferson County found a showing of oil and it was estimated at 30 bbls. daily. A new oil producing area was opened during the week when Bridwell Oil Co.'s No. 1 Wohlgamuth, NW cor. NE SE SW Section 30-6s-5w, found oil sand at 1,472 feet and the pay at 1,478-83 feet.

The same company made another location for No. 1 Barnett, NW cor. SW NE Section 30-6s-5w. No. 1 Wohlgamuth will not be placed on production until the No. 1 Barnett is completed.

In the Tatums Pool in Carter County a north extension well found oil. The well was Page & McFarland's No. 1 Brooks, NE cor. SW SW Section 13-1s-3w, which made 414 bbls. of oil in 24 hours from 2,303-85 feet.

Operators were preparing to abandon B. F. Lundy and others' No. 1 McConnell, SW cor. SE SW Section 18-1s-2w, Carter County, when the hole started filling with oil and it was then decided to put it on the pump. The showing of oil was found at 1,613-66 feet. It swabbed only 12 bbls. when first completed.

W. Gant and others' No. 1 Burton, SE cor. SW NE Section 31-1s-2w, Carter County, was landing tubing. This well was drilled deeper from 1,970 feet to 2,342 feet. While it was being drilled deeper another sand was found at 2,092-2,148 feet.

Allowable Up in Oklahoma City

The allowable production for the Oklahoma City Field for the first half of November, was increased 760 bbls. over the last half of October, by the Oklahoma Corporation Commission, at the October 28 hearing. The allowable was placed at 73,510 bbls. a day compared to 72,750 bbls. for the last half of October. The change was due to increased nominations including a 500-bbl. a day increase by the Century Petroleum Co., 2,000 bbls. a day by the Indian Territory Illuminating Oil Co., 600 bbls. by John H. Peacock, and 1,000 bbls. allowed the Wilcox Oil & Gas Co. The major changes in companies that reduced their nominations were, the Eason Oil Co., a cut of 500 bbls., the Philtex Pipe Line Co., 500 bbls., and the Champlin Refining Co., 1,000 bbls. Other companies made minor changes, but the major purchasers made no changes.

Nominations for the month of November and the actual pipe line runs from leases in the field for the first 25 days in October, were as follows:

Company—	Av. dly. nom. (Bbls.)	Av. dly. P. L. runs 25 days (Bbls.)
Anderson-Prichard	40	90
Canadian	800	770
Capitol P. & R.	270	63
Cement Ref.	.....	10
Century	1,500	1,151
Champlin	1,000	489
Continental	1,300	858
Cushing	100	.....
Eason Oil Co.	1,000	626
Empire	15,000	14,863
Gem Ref. Co.	50	50
Globe Ref. Co.	7,000	5,387
Philtex P. L. Co.	1,000	1,749
I. T. I. O. Co.	5,000	2,918
Magnolia	2,500	2,207
Major Prod. Co.	200	183
Okla. O. P. L. Co.	10,000	9,858
Peacock Ref. Co.	600	188
Petroleum	1,000	493
Refiners-Sterling	1,000	701
Shell	2,000	1,986
Sinclair-Prairie	4,000	3,949
Stanolind	17,000	15,715
Singleton	150	.....
Wilcox	1,000	3,632
Total	73,510	67,941

Questions of Conservation

Efforts are being made to improve the oil situation in Oklahoma before the next session of the legislature, which meets in January. Some express the opinion that a demand will be made for an investigation of the enforcement of proration in the Oklahoma City Field and the Greater Seminole area. A bill will be introduced in the legislature to change the conservation law so that it will cover proration and ratable taking and provide for unitization of pools.

During the last few months oil leaders have been preparing a new proration program which will be submitted to the Corporation Commission for adoption. A hearing on the petition will be delayed for at least 30 days, during which time the petition and the proposed order will be published to meet legal provisions.

Col. Cicero I. Murray has suggested some immediate changes, which are as follows: The taking of new potentials in the Oklahoma City Field by quarter sections at one time, with all the work to be done by disinterested parties; taking new potentials in the Greater Seminole district, with the work supervised by disinterested parties and forbidding companies to recondition wells in an attempt to increase production during the potential-taking time; adjustment of allowables in the Oklahoma City Field so as to remove inequalities and settle the discord which has separated operators into factions. An order on this change may be expected to be issued from the Corporation Commission within the next few weeks.

The establishment of new potentials in the two major districts of the State is expected to lead to a more equitable distribution of market facilities in the State. The potentials are expected to show that the potential totals now in use in both fields are too high.

Enforcement of ratable taking of crude oil by purchasing companies and pipe lines is expected to establish a parity between fields and leases in the State. This subject is expected to be incorporated in the proposed order.

Propose a New Plan

During the week a petition was presented to the Oklahoma Corporation Commission seeking to revise the proration methods in the Oklahoma oil fields. The petition provides for the enforcement of the ratable taking law and it was filed by the Anderson-Prichard Oil Corp. Hearing was set for November 28. Prior to that time the proposed rules and regulations will be advertised. The petitioners believe they are offering a set of rules and regulations to be established by the Corporation Commission that will prevent waste and inequitable and unfair taking of petroleum and prevent unreasonable discrimination in favor of any one common source of supply of petroleum as against another.

It is believed this plan was agreed upon several weeks ago after the Champlin Refining Co. petitioned the commission for the enforcement of the ratable taking law and sought to establish a parity between state fields. The Champlin Refining Co.'s petition was given the endorsement of Governor Murray, in a letter to the commission, but in view of the petition filed by Anderson-Prichard Oil Corp. it was agreed by the commission and the Champlin Refining Co. to withhold hearing on the latter company's petition.

The Anderson-Prichard petition proposes the establishment of five classes of pools, as follows: Class "A" pools to remain the same as they are and to be prorated by leases, tracts having a production of 20 bbls. or more a day to be curtailed 50 per cent of the excess over an average of 20 bbls. per well per day.

Class "B," Greater Seminole

Class "B" to be the semiflush areas, namely, Allen, West Asher, Bowlegs, Carr City, Earlsboro, Earlsboro Townsite, East Earlsboro, South Earlsboro, Konawa, Little River, East Little River, Maud, Mission, Sasakwa, Searight, Seminole, East Seminole, West Seminole, St. Louis, and any of the extensions thereof. Allowable production would be limited to 41 per cent of the potential of the leases. Leases in the group would not be permitted to carry over an underproduction unless created by avoidable circumstances.

Class "C," New Pools

Class "C" pools include Chandler, Fish, West Perry, Tatums and Wewoka townsite. It is proposed that the allowable in Chandler be held to 3,000 bbls. daily; Fish Pool, 2,500 bbls. daily; West Perry to 800 bbls. and Tatums to 5,400 bbls. Wells at Tatums capable of making 400 bbls. daily or more should be allowed 85 bbls. per well per day, and smaller wells allowed 43 bbls. per day. Wewoka townsite would be held to 2,500 bbls. daily. All wells in this class will be subject to taking of potentials.

Divides Oklahoma City Sands

Class "D" includes only the Oklahoma City Field, and the petitioners proposed that that field be divided into zones, including the Wilcox sand, the Simpson, the Siliceous lime and the fault line. Proposed rules and regulations for the Oklahoma City Field include drilling operations, safety measures and proration. Potential periods are established on a six months' basis, beginning January 1, at which time potential on all wells shall be fixed. During this six-month period monthly periods are established for the purpose of determining allowable and fixing the outlet.

Wildcat pools in the State would include all now specifically designated as such, and any such fields as may be opened. Production is to be limited to 50 bbls. daily per well on any new wells.

The proposed rules provide that pipe line companies be requested to file with the commission maps and plats of their pipe lines in all the fields in the State and locations and sizes of tanks and tank farm. They would be required to file reports of crude oil purchased or transported and to obtain from producers a report showing the origin of the crude oil tendered for transport or sale. Railroads would be required to report all crude oil transported by them, with affidavits showing the same information as is required of the pipe lines.

"Fair and Reasonable Treatment"

In varying the percentage of production from various pools of the State, the petition states, that "it is necessary, fair and reasonable to vary the percentage of curtailment as between the various pools because of peculiar conditions in each case, and in this, that said pools are not all served in common by the same pipe lines and purchasers and the market outlet for certain of them is greater than in the case of others; that some of them are older than others, with consequent greater reduction in potential flow and possible smaller production per day per well and are therefore entitled to higher percentage of allowable production; that in many cases individual pools are served by local purchasers whose facilities cannot be extended to the others, and in certain of the pools the sand and water conditions prevent greater curtailment than is possible in others, and in certain pools there is a more extensive drilling campaign and wells of larger capacity than in others."

The petition further sets forth that "the percentage of curtailment of various pools and the classification thereof, should be based on the existing relation between

the potential production of each pool, and the amount of crude oil which can be produced from said pool without waste; that because said relation is not the same in all the pools involved, the percentage of curtailment must necessarily vary as between pools; that a uniform percentage applied to all pools would result in the permitted production from some of them being less than the market outlet therefrom, while in others the permitted production resulting from such uniform percentage would exceed the amount which could be produced therefrom without waste, and would result in the permitted production from some of them being less than the minimum amount of production required to profitably operate said wells which would result in totally shutting in said wells and thereby causing a great amount of underground waste."

In the petition a section is devoted to the Simpson sand zone in the Oklahoma City Field, fixing potentials. The order would permit the commission to discontinue potentials on wells in this zone once it has been determined that potential takings are injurious to the wells because of water intrusion or other causes. The commission might set aside this group of wells and fix a flat allowable or another percentage of production to fit the needs.

The fact that the production from the Siliceous lime has declined seriously makes the proposed plan appear to be timely. It will permit the commission to act without continued and detailed hearings. Some express the opinion that it is only a matter of time, even under the stringent curb of today, until some change will have to be made to favor wells in this zone.

Atoka County

S. Miller's No. 1, SW cor. NE NW, Section 9-1-14, is a location. E. B. Croxton's No. 1 Downing, C SE SW, Section 8-1-14, is spudding. Tucker and others' No. 1 Little John, CNL NE SW, Section 9-1-14, was drilling at 200 feet. Barton's No. 4 Miller, SE cor. NW SE SW, Section 26-1-14, was drilling at 35 feet. Same operator's No. 3 Miller, NW cor. SW SE SW, Section 26-1-14, made 1 bbl. from 119-222 feet. Hicks and others' No. 2 Norris, SE cor. NE NW SE, Section 5-1-15, was drilling at 80 feet. Malarnee and others' No. 3 D.O.K., CWL E half, Section 35-2s-13, was completed for 3 bbls. from 422-60 feet. Morris' No. 1 Ray, NW cor. NE NE, Section 8-2s-12, was abandoned at 610 feet.

Carter County

Noble and others' No. 2 Trahern, SE cor. NW, Section 31-1s-2w, was completed for 422 bbls. of oil in 12 hours from 2,270-2,479 feet

Creek County

Big Four Petroleum Co.'s No. 1 McIntosh, SE cor. SW, Section 34-19-8, is a rig. G. Smith and others' No. 1 Grayson, SW cor. SE NE, Section 3-18-8, is a rig. Westfall Drilling Co.'s No. 1 Grayson, NE cor. SE NW, Section 3-18-8, is a location. Swift and Grimes' No. 2 Hall, SW cor. SE SE, Section 4-19-9, was drilling at 500 feet. Fogle & Marble's No. 1 Burton, C E half NE SW, Section 7-19-8, made 12 bbls. from 2,750-62 feet. H. Williby and others' No. 1 Davidson, CWL SE NW, Section 31-19-8, was abandoned at 2,600 feet. Duke and Hughes' No. 1 Evans, SE cor. NE, Section 30-19-9, was completed for 46 bbls. from 2,351-92 feet. Big Four Petroleum Co.'s No. 1 Thompson, SE cor. SW NE, Section 32-19-9, was abandoned at 2,450 feet.

Hughes County

Winona Oil Co. and Jarvis & Holmes' No. 1 Harjo, SE cor. NE NW, Section 29-7-8, is a rig. Sovereign Oil Co.'s No. 1 Jacobs, NE cor. SE NE, Section 16-7-8, is a rig.

Jefferson County

Lee Cross' No. 1 Hamlin, SE cor. SW SW, Section 26-6-5w, was drilling at 100 feet. O. V. Beck's No. 9 Seay, CNL SW SE, Section 34-6-5w, was drilling at 500 feet. Same operator's No. 8 Seay, NE cor. NW SW SE, Section 34-6-5w, made 50 bbls. from 1,515-81 feet.

Logan County

Shell Petroleum Corp.'s No. 6 Sebronk, SE cor. SW NE, Section 30-19-4w, an old well drilling deeper, waiting on cement at 6,022 feet.

Muskogee County

Mack Drilling Co.'s No. 8 Richards, SE cor. NW NE, Section 33-16-15, made 300 bbls. from 1,436-41 feet.

Marshall County

Bridwell Oil Co.'s No. 1 Barnett, NE cor. NW SW NE, Section 10-7s-8, is a location. Southward & Harvey's No. 1 Howard, NE cor. SE, Section 10-7s-6, was abandoned at 552 feet. C. M. Cornell's No. 2 Little, SE cor. NE, Section 25-7s-5, was abandoned at 535 feet.

Oklahoma County

Phillips Petroleum Co.'s No. 1 Beaty, NW cor. SE, Section 22-11-3w, is a cellar. Indian Territory Illuminating Oil Co.'s No. 4 M.K.T., SE cor. SW, Section 35-12-3w, made 91 bbls. a day from 6,217-6,489 feet. Phillips Petroleum Co.'s No. 1 Trail, SW cor. NE, Section 3-11-3w, made 2,578 bbls. in two hours from 6,284-6,414 feet. Slick-Urschel, Inc.'s No. 5 Frisco, NW cor. NE SE, Section 3-11-3w, made 10,098 bbls. in four hours from 6,265-6,383 feet.

Okmulgee County

Kennedy and others' No. 1 Walker, NW cor. SE, Section 10-13-11, is digging cellar. Clark & Rebold's No. 4 Roberts, CNL NW SW, Section 20-13-11, is a machine. Buckingham & Peal's No. 1 Home, CNL SW SW, Section 4-13-13, made 18 bbls. from 1,995-2,025 feet; total depth 2,265 feet. Vincent and others' No. 1 Escoe, NE cor. SW, Section 6-13-11, was abandoned at 3,338 feet. Coyle and others' No. 6 Goldman, CSL SW SW, Section 33-14-14, made 30 bbls. from 1,201-22 feet. Eagle Picher Lead Co.'s No. 2 Burgess, SE cor. NE SW, Section 26-12-12, is a rig.

Osage County

P. E. Vogle's No. 1, NW NE NW, Section 14-26-8, is a rig. Lewis Production Co.'s No. 1, SE cor. NE, Section 28-24-7, is a rig. Murringold and others' No. 1, NE cor. NW NW SW, Section 30-21-9, is a location. Lewis Production Co.'s No. 1, NW cor. SW, Section 27-24-7, made 90 bbls. from 2,645-61 feet. Johnson Oil & Refining Co.'s No. 1, SE cor. NE SE, Section 11-23-7, was abandoned at 2,923 feet.

Pawnee County

Johnson Oil & Refining Co.'s No. 1 Dutch, SW cor. NW SE, Section 19-20-10, is a location. R. J. Bookout's No. 2 Pierce, NE cor. SE SW, Section 20-20-10 (twin), was drilling at 450 feet. H. D. Hanbley's No. 2 Baker, SW cor. NW SE, Section 35-20-9, was drilling at 500 feet.

Pontotoc County

Denver Producing & Refining Co.'s No. 2 Hickman NE cor. SE SE, Section 25-5-4, is a rig.

Pottawatomie County

Mid-Continent Petroleum Corp.'s No. 1 Veaux, SW cor. SE, Section 31-7-4, is a rig. Reynolds and others' No. 1 Harden, SE cor., Section 29-7-4, is digging cellar. Brackett and others' No. 1 Beweley, SW cor. NW SE, Section 9-7-4, is digging cellar.

Seminole County

Dickson Petroleum Co. and others' No. 1 Bruner, NW cor SW SE, Section 20-9-6, is a rig. Carter Oil Co.'s No. 8 Campbell, NE cor. NW SW, Section 20-9-6, was completed for 273 bbls. at 2,714-39 feet.

Stephens County

Ables and others' No. 6 Akers, SE cor. NE NE NW, Section 11-1-5w, was drilling at 430 feet. Chambers' No. 5 Dare, NE cor. SE, Section 3-2s-8w, made 20 bbls. from 1,456-62 feet.

Tulsa County

R. A. Bonnell's No. 1 Prince, CNL NE NE, Section 30-19-14, is a rig. P. Short and others' No. 2 Company, SE cor. NW SW, Section 32-19-12, was abandoned at 300 feet.

Wildcat Operations in Oklahoma

Northern Oklahoma

ALFALFA COUNTY

Company, farm and location—	Remarks:
Smith Brothers' No. 1 Forbes, SE cor. NW NW Sec. 12-27-11w	S.D. 1,232 ft.
J. W. Bailey's No. 1 Acre, SW cor. NE Sec. 14-24-11w	S.D. 5,502 ft.

ATOKA COUNTY

Barton's No. 3 Miller, NW SW SE SW Section 26-1-14	Drlg. 175 ft.
Hick's No. 2 Morris, SE NE NW SE Sec. 5-1-15	Drlg. 165-85 ft.; shot 80 qts.; T.D. 215 ft.
George's No. 1 Reddin, SW NE SW Sec. 19-1-15	Drlg. 580 ft.

BECKHAM COUNTY

Pattel Royalty's No. 1 Goose Tree, SW SE SW SE Sec. 32-10-23w	S.D. 924 ft.
Mid-Texas Co.'s No. 1 Sidell, NE cor. SW SW Sec. 17-22-22w	S.D. 2,550 ft.
White et al's No. 1 Green, SW cor. Sec. 34-10-24w	S.D. 3,575 ft.

BLAINE COUNTY

Watonga Petroleum Co.'s No. 1 Masters, SW NW NW, Sec. 27-16-11w	S.D. 672 ft.

CADDO COUNTY

Abernathy & Brown's No. 2 Houston, Sec. 24-6-13w	S.D. 1,115 ft.

CHEROKEE COUNTY

La Piere et al's No. 1 Woods, C SE SE Sec. 27-17-21	S.D. 1,504 ft.

COAL COUNTY

Dodd & Burton's No. 1 Grigsby, NW SE NE, Sec. 35-1-8	Rig.
Funk & Russell's No. 1 Miller, SE NE Sec. 10-2-8	Drlg. 2,680 ft.

COMANCHE COUNTY

G. W. Stogner's No. 1 Doebel, C SW SW Sec. 3-3-9w	S.D. 1,450 ft.

CREEK COUNTY

O. O. Owens' No. 1 fee, NW cor. Sec. 23-15-7	Drlg. 1,000 ft.
E. L. Jillson et al's No. 1 Starr, SE NW Sec. 18-15-8	Drlg. Wilcox 3,852-55 ft; estl 200 bbls.

CUSTER COUNTY

Miley Pet. Co.'s No. 1 Caldwell, NE Sec. 12-14-14w	Location.

ELLIS COUNTY

Algers Pet. Co.'s No. 1 Roper, C SE NW Sec. 21-20-24w	S.D. 50 ft.

GRADY COUNTY

English Drlg. Co.'s No. 1 Heenan-Coe, NE SE NE, Sec. 32-3-7w	Show oil 3,255-87 ft.; to test: drlg. out cmt.; swbd. 3 bbls. per hr., est. at 50 bbls. daily; running tubing to pump 30 bbls. and S.D.

GARFIELD COUNTY

E. L. Love et al's No. 1 White, SE cor. NW Sec. 9-24-6w	S.D. 5,850 ft.

GREER COUNTY

French's No. 1 Murphy, SW NW Sec. 23-7-21w	S.D. 1,645 ft.

HASKELL COUNTY

Ault et al's No. 1 Hall, NW SW SW Sec. 14-9-19	S.D. 2,000 ft.
Ault et al's No. 1 Hall, SE NW Sec. 25-19-9	S.D. 200 ft.

KAY COUNTY

Lewis et al's No. 1 Harris, SE NW Sec. 14-25-1	Location.
Mummert Drlg. Co. et al's No. 1 Cormick, C NW SE Sec. 9-27-2	S.D. 3,693 ft.
Blackwell Oil Co.'s No. 1 Harshman, Sec. 2-26-1w	Rig on ground.

KIOWA COUNTY

McWhirter Bros.' No. 1 Kline, SE NW, Sec. 5-6-16w	S.D. 830 ft.
Christian's No. 1 Jones, NE SE Sec. 8-7-18w	S.D. 1,610 ft.

LINCOLN COUNTY

Sovereign Oil Co.'s No. 1 Flowers, SW SE SE Sec. 14-12-3	Drlg. 5,025 ft.

LOGAN COUNTY

Eason Oil et al's No. 1 Gun Club, NW NE Sec. 10-16-4w	Drlg. 4,190 ft.

NOBLE COUNTY

Stanolind O. & G. Co. et al's No. 1 Kalb, C NE NW, Sec. 33-20-2w	Rig.
Rollins et al's No. 1 Frank, SE SW, Sec. 6-20-2w	Rig.
Wentz Oil's No. 1 Wolff, C SE NW Sec. 17-20-2w	Wilcox 5,193-96 ft; flowed 1,817 bbls. 24 hrs.; drlg. to 5,262 ft; show wtr.; S.D.

OKLAHOMA COUNTY

Carter Oil et al's No. 1 Shawbell, C SW NE Sec. 1-12-4w	Rig.
Citizens Oil Co.'s No. 1 Sage Barber, NE cor. Sec. 21-11-3w	S.D. 1,300 ft.
L. C. Hivick's No. 1 Sunset Addition, NW SW NW Sec. 17-11-3w	S.D. 5,515 ft.

PAWNEE COUNTY

Rookstool's No. 1 Wylie, NW NE SW Sec. 6-20-5	S.D. 1,950 ft.

PITTSBURG COUNTY

Moffett & Hall's No. 1 Jones, NW cor. Sec. 14-8-14	S.D. 1,675 ft.

PONTOTOC COUNTY

Delaney's No. 1 Harden, NE SW, Sec. 30-2-7	Machine.
Blackwell Oil & Gas Co.'s No. 1 Abbott, NW SW NE Sec. 14-4-6	Drlg. 1,030 ft; 4,000,000 ft. gas.
Williams' No. 1 Krath, NE SE Sec. 33-3-4	Drlg. 1,380 ft.
Edna Marie's No. 1 McWhirt, NE SE Sec. 11-2-6	S.D. 570 ft.
Sunray Oil's No. 1 Grant, SE NE Sec. 11-4-8	Drlg. 2,710 ft.

POTTAWATOMIE COUNTY

Brown et al's No. 1 Sauter, NW cor. Sec. 35-11-4	Digging cellar.

ROGER MILLS COUNTY

Ute Oil Co.'s No. 1 Williams, C SW Sec. 23-12-24w	S.D. 5,150 ft.
L. C. Hivick's No. 1 Davis, C NW NE Sec. 4-11-26w	S.D. 3,420 ft.

SEMINOLE COUNTY

Donnelly et al's No. 1 Shepard, SE NE Sec. 4-8-8	S.D. 1,270 ft.

WASHITA COUNTY

Miley Pet. Co.'s No. 1 Montgomery, SW NW SE NW Sec. 23-9-17w	S.D. 1,004 ft.
Miley Pet. Co.'s No. 1 Wolfe, NE SW Sec. 23-9-17w	Rig.
Cooper & Terhune's No. 1 Blocker, NW cor. Sec. 29-8-19w	Show oil 2,459-67 ft.; S.D. 2,757 ft.
Burns & Prince's No. 1 Deck, SW cor. Sec. 21-8-18	S.D. 2,160 ft.

Oklahoma Panhandle

TEXAS COUNTY

Three Way Oil Co.'s No. 1 Crane, SW NW Sec. 11-1-18	T.D. 4,720 ft.; to cement.

Southern Oklahoma

ATOKA COUNTY

Malarnee et al's No. 2 D.O.K. Land, C SE SE Sec. 35-2-13	S.D. 25 ft.
Malarnee et al's No. 1 D. O. K. Land Co., C E half SE Sec. 35-2s-13	S.D. 680-704 ft., est. 3 bbls.
Morris et al's No. 1 Ray, NE NW NE, Sec. 8-2s-12	S.D. 610 ft.
Brookshire's No. 1 R. W. Rowland, NW NE SE Sec. 18-3s-10	S.D. 3,265 ft.

BRYAN COUNTY

A. C. Hahnee et al's No. 1 White, NW NE NW Sec. 28-6s-8	Abd. 1,605 ft.

JEFFERSON COUNTY

Bridwell's No. 1 Wolghomuth, NW NE SE NW, Sec. 30-6s-5w	S.D. 1,419 ft.
E. S. Bonner's No. 1 Burgess, NE SE Sec. 12-5s-8w	S.D. 750 ft.

MARSHALL COUNTY

Thomas' No. 1 Setliff, SW SE SE SW Sec. 36-5s-6	S.D. 20 ft.

McCURTAIN COUNTY

Stampfs' No. 1 Robert Harris, SW NW SW Sec. 14-9s-25	S.D. 2,778 ft.

PUSHMATAHA COUNTY

Whitehead et al's No. 1 Messer, SE SW SW Sec. 35-3s-18	S.D. 1,950 ft.

STEPHENS COUNTY

Calif. Prod. & Oper. Co.'s No. 1 Florence, NE NW SE Sec. 11-3s-6w	S.D. 330 ft.
Calif. Prod. & Oper. Co.'s No. 1 Garnett, SE NE NE Sec. 11-3s-6w	S.D. 325 ft.
Calif. Prod. & Oper. Co.'s No. 1 Suton, NE SE SW Sec. 12-3s-6w	Rig.
Gillette Bros.' No. 1 Cooley, NW SE NW Sec. 17-2s-8w	S.D. 25 ft.
George's No. 1 Ryan, NW SW NE, Sec. 31-3s-15	S.D. 510 ft

New Potentials, on 24 Hour Basis, Ordered in McPherson and Ellsworth, Kansas, Pools

By W. A. SPINNEY
Staff Correspondent, Kansas Fields

The Kansas Public Service Commission has ordered new potential tests to be made on all wells in the Ritz-Canton-Decker Field in McPherson County and in the Stratman Pool in Ellsworth County. Both of these tests will be over a 24-hour period in an attempt to eliminate alleged inequities in proration in these areas. The new potential test in the Ritz-Canton-Decker area will start November 10 and in the Stratman Pool on November 15.

The State's daily production during the seven days ending October 29 shows a 3,000-bbl. decline from the previous seven days. The daily average was estimated at 96,000 bbls. for the week ending October 29. The Ritz-Canton-Decker Pool, in McPherson County, declined approximately 2,500 bbls. and the production from the pools in the central western part of the State shows a decrease of 500 bbls. daily from the previous week.

In an attempt to extend production in the Ritz-Canton-Decker Field, Darrah & Aurrell's No. 1 Steinbeck, NE cor. SE Section 34-19-2w, McPherson County, a half mile west of chat production in that field, found water in the Simpson sand at 3,434-35 feet. The well found the Viola lime at 3,410 feet, where it also found water.

In the new Hunton lime area south of the Voshell Pool, in McPherson County, Shell Petroleum Corp.'s No. 1 Nickel, NE cor. SW Section 33-21-3w, found the Hunton lime at 3,566-67 feet, where it made 598 bbls. of oil the first 24 hours. It is the second well completed in the Hunton lime in that area, discovered by J. H. Mabee and others' No. 1 Nickel. This area is about 4½ miles north of the Hollow Pool, in Harvey County, which was the discovery area in the State to produce from the Hunton lime.

In the Hollow Pool, in Harvey County, Frost, Lloyd & Study's No. 1 Martens, NE cor. SE SE, Section 19-22-3w, flowed 825 bbls. in 24 hours, pinched in. Production was found in chat at 3,195-3,308 feet, with the pay at 3,302-08 feet. No open flow test has been made of the well as yet, as there is not enough storage on the lease to handle a full day's flow. The oil is being moved out by the Derby Oil Co. The owners have been allowing the well to produce around 21 bbls. an hour. The well is estimated to be good for about 6,000 bbls. daily.

Breslin and others' No. 1 in Section 27-19-2w, in the Ritz-Canton Pool, in McPherson County, extended production to the west when it found the chat at 2,955-62 feet, and a production estimated at 150 bbls. daily.

Austin and others' No. 1 Fog, SW cor. SE SE, Section 14-34-1w, a wildcat in Sumner County, found a showing of oil in chat at 3,965-70 feet. Oil rose 100 feet in the hole after which the crew began cleaning out. The top of the chat was at 3,909 feet.

Herndon and others' No. 1 Santa Fe, C NW, Section 19-23-1, a wildcat in Harvey County, found water in the Siliceous lime at 3,627-37 feet. The Wilcox sand was found at 3,537 feet, with a showing of oil and water.

Eleven New Operations

New operations in the week ending October 26 declined to 11. These were confined to five counties. McPherson leads with seven. The others were divided among Butler, Rooks, Harvey and Reno Counties.

McPherson continues to be the most active county in the State. Operators there are drilling offsets to producing wells, and a few wildcat locations are being staked. There were 34 tests drilling in the county in the week ending October 28. Last year 127 wells were completed in the county while 115 wells have been completed so far this year.

Lario Oil & Gas Co.'s No. 1 Neufeldt, SW cor. NW, Section 34-21-3w, southern McPherson County, is a new location one-half mile east of the recent completion of J. E. Mabee and others, which found oil in the Hunton lime, the second well in the State to find production in that formation.

According to orders of the Kansas Public Service Commission in the matter of taking potential tests in the Stratman area, Ellsworth County, for the purpose of continuing ratable taking and eliminating inequities, the commission has ordered new potential tests.

On October 28 a hearing on the advisability of taking these potentials was held in Wichita. After considering the information from producers in the field and upon information disclosed by investigation, the commission finds that inequities exist and that potentials should be taken on all wells.

The commission found that it is difficult, if not impossible, to apply the order issued on October 3, which provided for a field potential date on which to start application of rights between wells now producing and to be completed.

The commission orders potential tests to start at 7 a.m. on November 15, and to be completed according to the schedule to be issued from the umpire's office. These will be taken under rules formulated by the commission. The tests will be of 24 hours' duration and will be taken on all wells.

The commission also issued an order in the matter of taking new potentials in the Ritz-Canton-Decker area in McPherson County. The commission found that inequities exist and that potentials should be taken on both the chat and Viola lime wells for a full 24 hours, starting November 10, and to be completed according to the umpire's schedule.

Wildcat Operations in Kansas

(Descriptions are East unless marked otherwise)

BARTON COUNTY

Company, farm and location—	Remarks:
Sinclair Prairie Oil Co.'s No. 1 Turgeon, C NE NW, Sec. 3-16-12w	Rig.
Rankin's No. 1 Sooey, C SW NE Sec. 34-18-12w	Rig.
Doherty et al's No. 1 Roesler, SW NE Sec. 11-18-11w	S.D. 1,975 ft.
Smith et al's No. 1 Wilson, C NW SW Sec. 13-18-14w	Drlg. 2,325 ft.
Skelton Oil Co.'s No. 1 Ott, C SE SE Sec. 16-19-14w	Set liner 3,530-46 ft.; show oil; S.D. 3,605 ft.

BUTLER COUNTY

Cameron-Great Basin Oil Co.'s No. 1 Landon, C SE NW Sec. 13-28-2	U.R. 2,995 ft.
Ramsey's No. 1 Michael, SW NW NW Sec. 18-27-3	Drlg. 2,780 ft.

COWLEY COUNTY

Roth & Farout's No. 1 Craig, SE cor., Sec. 2-32-3	Rig.

DICKINSON COUNTY

Severs' No. 1 Livingood (O.W.D.D.), SE NW Sec. 13-13-21.	Drlg. 4,900 ft.

EDWARDS COUNTY

Mid-Kansas O. & G. Co.'s No. 1 Converse, SW NE NE Sec. 30-24-18w	U.R. 5,018 ft.

ELLSWORTH COUNTY

Buckford's No. 1 Burke, C NE SW Sec. 14-14-9w	S.D. 50 ft.
Gurley Bros. and Barnsdall's No. 1 Union Pacific, NW SW Sec. 7-14-7w	S.D. 1,375 ft.
Phillips Pet. Co.'s No. 1 Hochman, NE NW SE Sec. 17-16-7w	Drlg. 3,032 ft.
Morgan's No. 1 Andrews, NE SW Sec. 3-17-8w	Drlg. 3,286 ft.
Walker et al's No. 1 Remley, SW SE NE Sec. 23-14-7w	S.D. 3,610 ft.
R. Gear et al's No. 1 Kroboth, SE NW Sec. 12-15-10w	Drlg. 1,710 ft.

FINNEY COUNTY

L. F. Meyers' No. 1 Brown, S SW Sec. 16-25-34w	Rig.

FORD COUNTY

Swain et al's No. 1 Henthorn, C NW Sec. 21-25-24w	Drlg. 5,610 ft.

GRAHAM COUNTY

Schleimeyer et al's No. 1 Smith, SE Sec. 24-8-25w	Drlg. 3,615 ft.

HARVEY COUNTY

Liggett et al's No. 1 Davis, SW SE NE Sec. 7-24-1	S.D. 3,506 ft; wtr. at 3,490-95 ft.
Herndon, Blair, Deep Rock, No. 1 Santa Fe, C NW Sec. 19-23-1	Drlg. 3,475 ft.

HASKELL COUNTY

Victor Martin et al's No. 1 Weeks, C NW Sec. 8-28-31w	Rig.

KINGMAN COUNTY

Panhandle Drlg. Co.'s No. 1 Wetheral, C SE NW SW, Sec. 20-28-10w	Set 12-in. csg. 1,610 ft.; S.D.

LEAVENWORTH COUNTY

West et al's No. 1 Karb, C NW NE Sec. 32-10-21	S.D. 1,000 ft.

MARION COUNTY

Farrell et al's No. 1 Williamson, C NW SE Sec. 21-19-4	Spudding.
Vernon et al's No. 1 Schmidt, C SW NW Sec. 35-19-1	Rig.

McPHERSON COUNTY

Whan et al's No. 1 Nelson, NW SE Section 18-19-2w	Location.
Darby Pet. Co.'s No. 1 Pankratz, NW SE Sec. 5-20-1	Drlg. 2,910 ft.
Snyder et al's No. 1 Carlson, SE cor. Sec. 4-19-3w	Drlg. 2,594 ft.
Sidwell et al's No. 1 Nichols, NE NW NW Sec. 28-17-1w	S.D. 1,205 ft.

MORTON COUNTY

Hydraulic Oil Co.'s No. 1 State Land, NW SE Sec. 22, 34-43w	T.D. 3,640 ft.; temp. abd.

MORRIS COUNTY

Urschel et al's No. 1 Bersuch, NW SE NW Sec. 10-17-7	S.D. 1,385 ft.

NORTON COUNTY

Richards et al's No. 1 Colby, Sec. 17-4-21w	Rig.

OSAGE COUNTY

Briggs & Smith's No. 1 Wood, SE NW Sec. 21-14-15	S.O. 2,190-2,200 ft.; temp. abnd.

PRATT COUNTY

Ninnescah O. & G. Co.'s No. 1 Hardesty, SW SE SE Sec. 28-27-11w	U.R. 3,165 ft.

RENO COUNTY

T. L. Johnson's No. 1 Crotts, NE NW NE Sec. 27-26-10w.	S.D. 50 ft.
National Union's No. 1 Hill, NE SE Sec. 18-24-4w	Location abd.
Martin et al's No. 1 Yadu, C NW NW Sec. 15-24-5w	S.D. 318 ft.

RICE COUNTY

R. Ramsey's No. 1 School Lot, NW SW NW Sec. 32-19-9w.	Drlg. 2,075 ft.
Langston et al's No. 1 Wells, NE SE Sec. 4-20-9w	Rig.
J. Liggett et al's No. 1 Thodel, C NW NW Sec. 11-21-7w	S.D. 50 ft.

RUSH COUNTY

Barnsdall's No. 1 Schultz, SW cor. Sec. 3-19-16w	Drlg. 3,849 ft.
Skelton et al's No. 1 Brock-Hartman, SW SE NE Sec. 4-18-16w	S.D. 50 ft.

SEDGWICK COUNTY

Scroggins et al's No. 1 Bartlett, NW SE NW Sec. 35-27-1	S.D. 1,522 ft.

SHERIDAN COUNTY

Flo et al's No. 1 Shoemaker, SE SW Sec. 27-7-26w	Hole full water 4,535-45 ft.; S.D.

STEVENS COUNTY

Argus Prod.'s No. 2 Christopher, C NE Sec. 10-33-39w	S.D. 5,521 ft.

STAFFORD COUNTY

Stringer et al's No. 1 Swindle, SW NE Sec. 2-25-11w	Spudded; S.D.

SUMNER COUNTY

Austin et al's No. 1 Fog, SW SE SE Sec. 14-34-1w	Drlg. 3,960 ft.
Trees Oil Co.'s No. 1 Tompkins, SW Sec. 26-33-1	Location.
Trees Oil Co. and Shell's No. 1 Springate, NE SE SW Sec. 6-34-2	S.D. 3,639 ft.

Oil and Gas Conservation Rules

Fifteen rules have been made for the conservation of oil and gas in Kansas and copies have been sent to oil and gas producers by the Kansas Public Service Commission. These rules were made at the suggestion of the commission and were formulated at the last meeting held at McPherson.

The 15 rules consist of the following subjects and each is defined: Rule 1, waste prohibited; rule 2, waste defined; rule 3, gas to be confined, strata to be protected; rule 4, approved methods of preventing waste; rule 5, notice of intention to drill or deepen and filing of well records; rule 6, installation of high pressure fittings; rule 7, wells not to be permitted to produce oil and gas from different strata; rule 8, operator shall effectually shut out and exclude all foreign waters from any oil or gas bearing stratum; rule 9, vacuum pumps not to be installed except upon application to the Kansas Public Service Commission; rule 10, shooting of wells; rule 11, damaged wells to be abandoned; rule 12, gauge to be taken, reports to commission; rule 13, notice to contractors, drillers and others to observe rules; rule 14, designation of leaseowner and name of well; rule 15, records and reports shall be filed by operators.

According to rule 7, no well in the State shall be permitted to produce both oil and gas from different strata unless it be in such manner as to prevent waste of any character to either product. If a stratum should be encountered bearing oil or gas the owner, operator or contractor should drill deeper, the stratum first penetrated and likewise each and every oil and gas producing horizon in turn, shall be closed separately and if it is not wanted for immediate use, it shall be securely shut in so as to prevent waste, either open or underground.

Rule 14 states that the owners of any oil and gas mining lease in Kansas upon which drilling operations are or may hereafter be carried on shall post and maintain a substantial sign in a conspicuous place upon each well or derrick giving the name of the farm, the section, township and range, the name of the leaseowner and number of the well.

A Notable Oil Producer

One of the most productive wells in the State in recent years is the Phillips Petroleum Co.'s No. 2 Miller, NW cor. NE NE, Section 3-21-6w, in the Welch

(Continued on Page 68)

North Government Wells Field Extended North; Two New Tests Starting in the Tuleta Pool

By B. D. STEVENSON
Staff Correspondent, Southwest Texas Fields

SAN ANTONIO, Tex., Oct. 31.—Runs from North Government Wells Field in Duval County will hereafter be limited to a maximum of 100 bbls. to the well, according to notice to producers by the Magnolia Pipe Line Co. The company at the same time advanced the price of crude in the Laredo district from 80 cents to 90 cents per barrel meeting the general advance over the country. It is the only purchaser in the Laredo district thus far to advance the price.

Allowables fixed by the railroad commission for the North Government Wells Field are 40 bbls. per well and an allowable for acreage around each well, making the maximum allowable for one well on 20 acres 200 bbls. per day. Magnolia has notified producers it will take 52 bbls. from each well and 4 bbls. additional up to 4 acres and 5 bbls. additional from 5 to 9 acres. Beyond 9 acres the maximum of 100 bbls. is reached. Magnolia is the only line taking production from the pool.

Highland Oil Co., which extended the field a quarter mile north with its No. 1 Lundvall a week ago in Survey No. 42, has further extended it to the north with No. 2 Lundvall which came in from sand at 2,249-74 feet. Volume was not reported but it was said to be as good as No. 1 which was estimated at around 200 bbls. or more per day.

This north end of the field is still a question mark with nothing to indicate how far the field will run as there are no dry holes to shut it off.

During the week Sun Oil Co.'s No. 1 Duval County Ranch Co., in Survey 78, 3 miles north and 1 mile east of production, set casing on a good showing of oil at 2,137-54 feet without making a drill stem test. As this report was being written they had drilled in and were testing.

Buchanan & Tyrrell, on Survey 96, 3 miles north of the field and 2 miles west of Sun's test, had what was supposed to be the Cole sand at 1,644-50 feet with a showing of oil and has set casing and drilled in and is testing. It is a little low for the Cole sand but may be it. This is also on a lease that belonged to the Sun Oil Co.

Leases on the Duval County Ranch Co. lands which cover most of the northwest quarter of the county, were taken 10 years ago by major companies and are due to expire early next year. This accounts for much of the drilling and also accounts for seting casing on showings without making drill stem test. Humble since top leased considerable of the acreage. Early expiration of leases led to the bringing in of the Sarnosa Pool.

Sun's test on Survey 78 is located with reference to North Government Wells about as that pool is to the next south of it and as that is to the next south and so on down the line. Geography seemed to indicate that another pool was due there whether geology did or not.

In the North Government Wells Pool other than the extension north of the Highland Oil Co. one of the most interesting tests is Luse & Russ' No. 1 Hahl, 330 feet from the north and west lines of the southeast quarter of Survey 45 and considerably west of production, the farthest west test in the field. It got the Cole sand at 1,009 feet and Seacord & Putnam's No. 1 Johnson which was completed first in the Cole sand and the discovery well of the field got that sand at 1,001 feet. Seacord & Putnam's No. 1 Johnson is the only test that has attempted to complete in the Cole sand. It was later drilled to the regular sand of the field at around 2,300 feet and completed for a big well. It is near the west edge of the field.

The Luse & Russ test is also on a line with the field and McGinley's No. 1 Lundell in the southeast corner of Survey No. 48 and a little west of the north end of the original Government Wells Pool. If it should make a good well in the regular sand of the field it will open up a big question as to the probable limits of the North Government Wells Pool and with the Sun test on Survey No. 78 the area has taken on a very interesting aspect.

The North Government Wells Pool, which at this time is the most active proven spot in Southwest Texas, produced 155,660 bbls. of oil during September. Forty wells were listed in the field though some were not on production the full month, having been completed during the month. But, averaging them for the full month, the field produced an average of about 130 bbls. per well. With the new action by the Magnolia fixing a minimum of 100 bbls. to the well production will be materially reduced.

New Gas Showings

Winch & Billings got a considerable showing of gas in No. 1 S. Benavides, 3 miles east of the south end of the Escobas Pool in Zapata County and several miles southwest of the Henne, Winch & Fariss Pool in Jim Hogg County. The Escobas is the nearest production but it is in the wrong direction to be an extension of it. It got sand at 1,647-63 feet, a couple of hundred feet deeper than in the Escobas and has set casing.

This follows by a week the finding of a new gas field at 2,230-45 feet by Clark & Cowden several miles farther east in Jim Hogg County.

More Tests at Tuleta

Two new tests are being started in the Tuleta Pool in Bee County. Dirks Brothers' No. 1 fee is a half mile due west of the discovery well and Taber and others' No. 1 Harris is about 500 feet southwest of Nichols and C.R.&M. Oil Co.'s No. 2 Harris reported last week and which is the farthest southwest producer in the field, flowing about 15 bbls. hourly on choke. There is also to be some drilling to the northeast and also another location is talked of a mile or more to the southwest. After the bringing in of the discovery well the field started off with some mild disappointments. Every test drilled has been a producer with the exception of one hole lost, but they did not come in as big as had been hoped. However, operators are not through as the ample thickness of sands and the good production in the discovery well and now the completion of Nichols and C.R.M Oil Co.'s No. 2 Harris for 360 bbls. daily seems to indicate that there is a large body of oil there somewhere. The discovery well on choke has been maintaining 200 bbls. daily and 2,000,000 feet of gas without loss of pressure or volume for many weeks.

Goliad County

Over in Goliad County the news is not so good. Slick-Seeligson, Inc.'s No. 1 Kaufman, about 9 miles northeast of the Pettus Pool in Bee County is coring at 4,471 feet without getting production. It is about 600 feet southeast of Zoch's No. 1 Kaufman, the discovery well and only other test in the Hords Creek Field, which got pay at 4,232 feet, a big volume of gas spraying oil. Slick-Seligson had a sand at 4,242-48 feet which took a good looking core but on drill stem test did not show up very well.

Slick-Seligson's No. 2 Poetter, in the Slick Pool on the DeWitt-Goliad County line, about 15 miles northeast of the Pettus Pool in Bee County, 10 miles north of the Hords Creek Field, at 4,285 feet, is getting past the pay depth in No. 1 Poetter which came in at 4,212 feet a big gas well and making considerable oil. No. 2 is 1,200 feet southwest of No. 1 and in the direction of the trend of fields in that district. It had a little streak of sand at 4,269 feet but otherwise failed to get the same sand, producing in No. 1 Poetter.

Saxet Field in Nueces

The two new 4,800-foot producers in the Saxet Field are recognized producers of gas and spraying oil but it yet remains to be seen what their full potentiality is. Gulf Coast Oil Co.'s No. 2 Perkins and Lagasse is at 4,887 feet and Oso Drillers' No. 3 Roark at 4,867 feet, the first with 1,700 pounds pressure and the second with 1,800 pounds pressure. They are 2 miles apart and the first producers in that sand in the field. Operators find in the Saxet Field in other sands that experimenting with bottom hole chokes frequently gets better oil production and it is frequently a few weeks before the best combination is found for a well. These two may eventually be oil wells. The gas pressure in Oso Drillers' No. 3 Roark later dropped to 1,600 pounds which was thought favorable.

Gulf Port Oil Co.'s No. 2 Bliss at 4,769 feet, also in a new sand and the only producer in that sand in the field, is reported now as flowing about 200 bbls. with 1,100 pounds on the tubing, and on choke.

Titus and Calloway, who recently made location for five tests in the field, have started work on three of them and Sea-

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Wildcat Operations in Southwest Texas

Week Ending October 29

ATASCOSA COUNTY

Company, farm and location—	Remarks:
American Central Oil Co.'s No. 2 Mary McConnell, 150 ft. W of E line, 300 ft. S of No. 1 Blk. 138, W. C. M. Baker Sur., 3 miles W and 6 miles S from Somerset	T.D. 1,660 ft.; rig moved off.

BANDERA COUNTY

F. A. Brown's No. 1 R. B. Watson, 600 ft. N of cen. of S line of Sec. 71	T.D. 330 ft.; drlg.
E. A. Parkford's No. 1 Duke, 200 ft. from S line, 150 ft. from W line of Sec. 7, G.C.&S.F. Sur.	Location.

BASTROP COUNTY

J. E. Emanuel's No. 1 H. Klemm, 817 ft. from W line, 300 ft. from S line of tract in R. S. Teal Sur.	Rigged up and standing.
Marts & Beaven's No. 2 Sloop, 1,200 ft. E of No. 1 Sloop, J. Burleson Sur.	T.D. 1,660 ft.; drlg.
Ogden & Reed's No. 1 Miers, beginning at the intersection of the C. L. Riddle and W. M. and Viola Riddle tracts, thence W 300 ft., thence S at right angles 150 ft. in W. H. Leech Sur.	Location.
Properties Trading Co.'s No. 1 Henry Freitag, 400 ft. from SE line, 1,800 ft. from NE line of P. Conley Sur.	T.D. 2,118 ft.; standing.
Teas and Gant's No. 1 Mikulec, 330 ft. to NW and SW lines of tract in Wm. Barton Sur.	Derrick.
Wilson & Edwards' No. 1 Randall, 150 ft. from S and E lines of tract in Bernard Bymer Sur.	Moving in tools.

BEE COUNTY

Fitzgerald & Pryer's No. 1 Albert Johnson in M. Alcarte Sur.	Abnd. location.
Nichols & Bruner's No. 1 Grover Heldenfels in John Bryan Sur., 891 ft. from S line, 1,950 ft. from E line of tract	T.D. 2,100 ft.; S.D.
Southwest Drlg. Co.'s No. 1 Riggs, 200 ft. from N line, 4,200 ft. from E line of James Nowland Sur.	T.D. 3,000 ft.; abnd.

BELL COUNTY

Alex Krause' No. 1 W. P. Edds, 650 ft. from S line, 150 ft. from W line of 100-ac. tract in M. Moreno Sur.	T.D. 712 ft.; S. D.
James Scoggins' No. 2 Warrick, Ingram Sur.	T.D. 1,432 ft.; cleaning out.

BEXAR COUNTY

Amsden-Ingersoll-Miller's No. 1 Strumberg, 450 ft. to W line, 1,020 ft. to N line of tract, 12 miles SW of San Antonio	T.D. 1,054 ft.; standing.
S. W. Blount's No. 1-A S. A. Land & Dev. Co., 10 ft. from No. 1 in I. Perez Sur.	T.D. 965 ft.; moving in rotary.
L. S. Bolling's No. 1 W. Kelso, 150 ft. from N and E lines of tract in Urregas Sur.	T.D. 1,465 ft.; abnd.
Robert C. Hill's No. 1 Schell, 1,300 ft. from N line, 1,100 ft. from W line of 161-ac. tract in Sec. 234, Perretaux Sur.	Drlg. 830 ft.; in rock.
Rollin V. Hill, Sr.'s No. 1 Max Boeck, 1,700 ft. from N line, 2,700 ft. from E line of tract in J. R. Shepherd Sur.	T.D. 250 ft.; drlg.
F. E. Kestler's No. 1 Cover, 330 ft. from S and E lines of tract in Miguel Fortaris Sur. No. 5	Moving in rig.
Dr. Ewell Neil's No. 1 J. Watson, 500 ft. from W line, 1,700 ft. from S line of B. Martinez Sur.	T.D. 2,495 ft.; in Edwards, dry.
Otis Oil Co.'s No. 1 Bachmeyer, 150 ft. from NE and SE lines of 425 acres in J. Montez Sur.	T.D. 600 ft.; fishing.
Jones & Voltz' No. 1 Bonkowsky, 150 ft. to N and W lines of William McMenenes Sur., 12 miles E of San Antonio	T.D. 907 ft.; standing.
Schneider, Rees et al's No. 2 Claussen, 12 miles NE of San Antonio	T..D 1,330 ft.; S.D.
M. E. Trussell's No. 1 L. B. Carruthers, Sr., 2,000 ft. from W line, 400 ft. from most easterly N line of tract in Sam McCullough Sur.	T.D. 1,004 ft.; bailing heavy oil.
H. G. Venable's No. 2 F. Dulling, 1,500 ft. W of center of E line of tract	Location.

BLANCO COUNTY

Hardy Sitton's No. 1 Luders, 150 ft. from S line, 1,420 ft. from E line of James Stanford Sur.	T.D. 1,540 ft.; standing.

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Lima and Central Ohio Fields Continue Active; Few Completions Reported in Kentucky

By GEORGE A. WHITNEY
Staff Correspondent, Central West Fields

FINDLAY, Ohio, Oct. 31. — The old Lima Field of northwestern Ohio and the Central Ohio Field were the two most active in completions in the Central West Field, although no large producers were found in either of the two Ohio fields. The Indiana Field failed to report any completions. For a long period there was a scarcity of water for drilling purposes but of late there is an abundance of it.

In the old Lima Field the best completion was a test drilled by Jones & Coyle on the George Mann farm, Section 28, Crane Township, Wyandot County, that produced an initial of 60 bbls. and may bring about a more active development. In the early days of the Lima Field, Wyandot County had some excellent producers. Jones and Coyle are drilling a second test on the Margaret Brillhart farm, Section 28, Crane Township, and McPheron and others are drilling on the Howard A. Walton farm, Section 21, same township.

Mary V. Conzen is drilling on the C. E. Mercer farm, Section 14, Liberty Township, Wood County. Wilson & Potter abandoned Nos. 1, 2 and 3 on the Amelia Spooner farm, Section 11, same township. The Ohio Oil Co. abandoned No. 22 on the Frank D. Slotterbeck farm, Section 17, Bloom Township, same county.

In Sandusky County, Jackson Township, the Ohio Oil Co. abandoned Nos. 2, 4 and 5 on the C. Gilliard farm, Section 14, and Orval Good and others did the same with No. 5 on the C. M. Sackett farm, Section 16. In Washington Township, the Ohio Oil Co. abandoned Nos. 1 and 2 John Bork farm, Section 30, same township; also No. 1 on the S. Foster farm, same section. In Scott Township the Ohio Oil Co. abandoned No. 4 Noah Kline farm, Section 3, also No. 8 on the A. E. Stahl farm.

In Allen County unknown parties are drilling a second test on the Valentine Scherer farm, Section 35, Spencer Township. The Ohio Oil Co. abandoned No. 7 George W. Tabler farm, Section 9, and drilling No. 8, same farm.

In Auglaize County, Adrian Tester's No. 3 on the Harry J. Hanold farm, Section 34, Moulton Township, is a 5-bbl. pumper.

In Mercer County, O. G. Sellers' test on the A. Rindler farm, Section 21, Granville Township, was dry, and Masters Oil & Development Co.'s No. 2 on the Adam Hening farm, Section 19, Gibson Township, produced 1 bbl.

In Darke County, William Wilt, trustee, has a 1-bbl. producer on the Herschel Beatty farm, Section 18, Allen Township.

In Shelby County the Eilerman Oil Co.'s test on the James H. Hurd farm, Section 25, Cynthian Township, is a dry hole.

In the Tiffin Field, Seneca County, Liberty Township, R. E. Greene is drilling No. 2 T. C. and B. G. Shoull farm, Section 30. M. E. Kiser is drilling No. 2 L. E. Koerper farm, Section 34, and Byron Jones & Son are drilling No. 1 John Cessna farm, Section 6, same township. Sandusky Gas Co. is drilling No. 2 D. S. Hostler farm, Section 3, Hopewell Township. Ohio Oil Co. abandoned No. 2 Charles B. and Ida Miller farm, Section 31, Pleasants Township, same county.

In Hardin County, Pleasants Township, Grover Canwell is drilling on the Allen B. Rouston farm, Section 13.

CENTRAL OHIO

Ten completions were reported from the Central Ohio Field proper, two being oil producers with an initial of 29 bbls., four were gas wells and three were dry holes.

In Ashland County, Stewart and others' No. 4 on the Herbert Austin farm, Section 30, Perry Township, shows a light gas well in the Berea sand from 546-76 feet. Faulkner & Phelps' No. 6 on the Guy Humm farm, Section 29, Mohican Township, has an oil and gas showing in the Berea sand from 714-67 feet, and will be given a shot in hopes of making a commercial producer out of it.

In Lorain County the Ohio Fuel Gas Co. has a gas well in No. 1-5,674 on the Howard J. Cox farm, Section 15, Carlisle Township. Ramage & Willis failed to find any pay sand after drilling into the Clinton lime on the Francis E. Morgan farm, Lot 94, Eaton Township.

In Huron County, Palmer and others' test on the E. M. Palmer farm, Section 2, Greenwich Township, was dry in the Brown shale from 400-11 feet, and has been plugged.

In Knox County, Bonnett and others' No. 2 on the William Engle farm, Lot 30, Howard Township, is a dry hole from 616-24 feet.

In Fairfield County, City Natural Gas Works is drilling No. 3 on the William Hartman farm, Section 26, Pleasants Township, and No. 5 on the E. Ruff farm, Section 2, Berne Township.

In Coshocton County, Hulse & Kuntz are drilling on the Rolla McKee farm, Section 17, Perry Township, and Preston Oil Co. is drilling No. 2-1,519 on the D. S. Snider farm, in Newcastle Township.

In Licking County, McClay Brothers are drilling on the E. and M. Hoover farm, Section 3, Perry Township.

In Muskegon County the Hopewell Oil & Gas Co. drilled in a good gas well on the Bert Middleton farm, Section 10, and the Pure Oil Co. is starting No. 3 on the Scott-Hammond farm, Section 3, same township. Atha Co.'s No. 5 on the L. M. Bryan farm, Section 20, Perry Township, is reported good for 5 bbls. The Wittmer Oil Co. is drilling No. 2 on the Sidney Taylor farm, same section and township.

In Athens County, Robinson Brothers drilled in a gas well on the Ora Lunch farm, Section 13, Lee Township.

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Seven Producers Completed in Eastern Fields; Southwest Pennsylvania Gets Fair Well

By STAFF CORRESPONDENT

PITTSBURGH, Pa., Oct. 31. — In a notice to all producers with whom contracts exist for all crude run into the lines of the Buckeye Pipe Line Co. in Southeast Ohio, the South West Pennsylvania Pipe Lines in Southwest Pennsylvania, and the Eureka Pipe Line Co. in West Virginia, the South Penn Oil Co. stated that the allowable production to be purchased for the month of November would be the same as that for October or 70 per cent of the November, 1931, figures or the average month.

In part the notice stated: "Our company has notice that its outlet for Pennsylvania Grade oil throughout the month of November will be the same as through the month of October. Therefore, we must ask all our customers to continue their curtailment of production throughout November in keeping with the curtailment asked for the month of October.

"We must again mention that since we hold Standing Purchase Orders for the transfer to our credit of all Pennsylvania Grade Oil as run, we will be compelled to cancel these orders should we find the October production exceeding the amount asked for, or should the month of November exceed that amount."

As the South Penn Oil Co. purchases most of the crude produced in those districts, curtailment in the lower eastern fields is strictly adhered to, and with a dwindling allowable and a declining market, the industry has absorbed severe shocks, but with any industrial increase the eastern fields should benefit almost immediately as large stocks have not been stored.

Completions

Completions in the lower eastern fields have maintained a fair level during the past few weeks, this week totaling seven producers with an initial production of 96 bbls., four gas wells, and reports of two dry holes. There were several wells more than fair.

One of the best wells completed recently was brought in in the new pool in Amwell Township, Washington County, Southwest Pennsylvania, between Pancake and Amity, on the Martha Hazlett farm. It was a second test of Raymond Orrill & Co. and was completed in the Fifth sand at a depth of 2,950 feet. With the tools but a few feet in the sand, the well produced 50 bbls. the first day, and showed an increase the next few days. It is rated good for 50 bbls. a day natural. This is the fifth good well in the new pool, four by the same operator on the Walker and Hazlett farms, and one by the Union Gasoline & Oil Corp. on the Mary Lindley farm. With the advent of a resumption of full production in the East, drilling operations can be extended in this district. At the present time, the Carnegie Natural Gas Co. has a rig standing on the Mrs. Minzer farm. No other operations have been announced on account of the difficulty of an available market.

SOUTHEAST OHIO

Three producers and one dry hole was the total of work completed in Southeast Ohio during the week. None was large and the dry hole was a test of the Wittmer Oil & Gas Properties off any producing tract in Elk Township, Vinton County, and takes the form of a wildcat test. In Section 16, on the Vinton County Infirmary tract, this test was drilled through the Medina sand and to a depth of 2,796 feet without any showing. It is near McArthur.

In Medina County, the Oko Oil & Gas Co. completed No. 8 on the Celestia Richards farm, Section 1, Chatham Township. It was drilled in the Berea grit, depth 480 feet, and produced 5 bbls. the first day after shot. In Perry County, the Huntington National Bank completed No. 27 on the Rodgers Brothers lease, Section 22, Monroe Township. It was drilled in the Berea sand at 1,172 feet and produced 6 bbls. the first day after shot.

In Washington County R. J. Braden and others completed a test on the George P. Miller farm in Section 28, Lawrence Township. It made 1 bbl. the first day natural which was not improved by shot in the first Cow Run sand at 526 feet.

Drilling in Ohio

In Southeast Ohio several wells are soon due in the sand. In Coshocton County, the Preston Oil Co. is drilling a second test on the F. H. Donaker farm in Section 17, Perry Township. In Pike Township, the test of W. E. Stephenson on the M. L. Noland farm is due in. In Perry Township, the Murphy Petroleum Co. and others are rigged up on the Ward A. Little farm, Section 17.

In Licking County, McClay Brothers are drilling on the Emmett E. and Olive M. Hoover farm in Section 3, Perry Township. In Fallsbury Township, Upham and Perkins have a test drilling on the C. M. Babcock farm, Section 17. In Hanover Township, the Edward H. Everett Co. is drilling on the Felix Claypool lease No. 2 in Section 7. In Muskingum County, the Ohio Fuel Gas Co. has rigs standing for two additional wells on the Ida B. Staker farm in Section 10, Brush Creek Township. The Atha Oil Co. is about due in with No. 5 on the T. M. Bryan farm, Section 11, Perry Township.

WEST VIRGINIA

Three gas wells and one fair producer was the total of the completed work in West Virginia during the week. In addition, there was one dry hole reported. The producer was the test of Paul Roberts on the Hall and Ackley lease in Wirt County on the waters of Rock Run in Burning Springs district. It was drilled in the Injun sand and is showing for 10 bbls. a day, natural. The dry hole was in the same county but over in Clay district. Brian and Baker drilled a test on the D. P. Higgins farm on Dyers Run through the second Cow Run sand and found it without a show.

Gas Wells

A fair gas well, the best in recent months, was completed in the new extension in Barboursville district, Cabell County, where the Merritts Creek Gas Co. drilled a test on the John Ricketts

farm in the Berea at 3,004 feet. The test shows in excess of 3,500,000 feet a day in the 6⅝ casing.

In Ritchie County, the Southern Oil Co. completed a test on the S. P. Pribble farm on the south fork of Hughes River in Murphy district. It had no showing of oil and was void in the Berea grit, but will make a fair gas well in the 100-foot sand. In Wayne County, the Wayne United Gas Co. completed No. 51 on the Newcomb tract in Stonewall district in the Brown Shale at 3,012 feet. It will make a small gas well.

Drilling in West Virginia

Among new work starting in West Virginia, the following are listed: In Calhoun County, C. W. McCall & Co. have started drilling a second test on the Hamilton, Jarvis and Garrett lease in Sherman district. In Gilmer County, these operators have a rig standing for No. 6 on the Fletcher Stout farm in Center district. In Monongalia County, the South Penn Oil Co. has a rig completed to drill its No. 4 on the A. B. Price farm on Dunkard Creek in Clay district, deeper from the Injun sand. This was a gasser, to the Fifth sand which had proved productive of oil on adjoining leases. In Pleasants County, the Eureka Oil Co. has started drilling on the W. P. McTaggart farm in Grant district.

In Lincoln County, R. H. Adkins and others are down 1,850 feet on the J. O. Miller heirs farm in Jefferson district. In Union district, the Woodall Gas Co. has reached 900 feet in No. 4 on the James R. Adkins farm, and R. H. Adkins is down 1,550 feet in a second test on the Golza Bragg farm. In Washington district, the Havard Gas Co. is moving in the tools for No. 3 on the Standard Fuel Gas Co. farm. In Sheridan district, the B. C. K. Gas Co. has reached 1,520 feet on the Calvary Lunsford farm.

A new test in Cabell County is in Guyandotte district where C. C. Wolfe and others have spudded in and started drilling on the Calhoun and Justice lease. Across the line, the Midway City Gas Co. is down 2,595 feet in a second test on the O. C. Morrow farm. The test of J. W. Ramsey & Sons is soon due to be in with the tools down 2,900 feet.

In Harrison County, Nathan Goff has No. 7 drilling on the same farm in Clark district and it is 1,750 feet deep. In Wetzel County, E. M. Hannan and others have a test drilling on the Joseph Stender farm in Magnolia district. In Doddridge County, the Columbian Carbon Co. is down 2,400 feet in No. 62 on the Lewis Maxwell farm in West Union district. In Tyler County, McCullough and Hammond are drilling on the D. L. McCullough farm in Centerville district.

In Wirt County, Grover Whitecotton is drilling on the Cecil Jackson farm in Clay district. M. H. Drake has a rig standing on the John L. Showalter farm. In this district, Donald Nutter is down 400 feet on the William Hull farm.

In Roane County, C. C. Cleavinger and others have started drilling their test on the O. S. and Mary Taylor farm in Geary district. In Jackson County, H. H. Sheppard and others are down 475 feet on the T. C. Burdette farm in Washington district.

SOUTHWEST PENNSYLVANIA

Three producers and one gas well summarizes the work of the week in Southwest Pennsylvania. The one good producer in Amwell Township, Washington County, was followed by two more Dunkard sand tests in the new development carried on by E. H. Teague & Co. In South Franklin Township, these operators completed a test on the McKennan farm in that formation at 900 feet and have a 2-bbl. producer. In North Franklin Township, they completed a test on the Joseph Moore farm in the same formation at 881 feet and it is a well of similar size. This further extends their available pool of shallow drilling.

In Fawn Township, Allegheny County, W. I. Gettman completed a test on the Peter Hess farm at 2,165 feet. It was dry in the Fifth sand but is showing for a fair gas well in the 30-foot sand.

In Ross Township, Butler County, Frank Hardt has started a test on the Norving farm. Close by, Henry Brooker has a test drilling on the Peter Schramm farm.

In Independence Township, Beaver County, the Blagle Oil Co. has started a test on the Blagle heirs farm. In Alleppo Township, Allegheny County, C. S. Parks and others have made fair progress with their second test on the J. D. Burg farm and will soon be in the 100-foot sand.

Wildcats

The E. E. Grimm and Benedum & Trees test on the E. E. Knowlton farm in Section 10, Independence Township, Washington County, Southeast Ohio, is shut down but drilling will be resumed as soon as minor repairs have been made. The bottom of the Oriskany sand proved very hard drilling and slow progress was made. The depth is now around 5,700 feet.

In Virginia, the Benedum & Trees tests continue drilling. In Wise County, the depth on the I. Kaufman farm is now about 2,400 feet and the test on the Clinchfield Coal Co. tract in Russell County has reached 2,900 feet.

In West Virginia the Benedum & Trees test on the Pocohontas Coal Co. property in McDowell County is now down to 5,550 feet, with no additional showing. A new wildcat has been started but not too far from production. In Wood County, C. T. Smith and others have a rig standing on the George Webber farm in Clay district.

Southwest Texas Fields

(Continued from Page 46)

graves is starting one and Gibson Oil Co. another. These are all new operators in that field.

Laurel Field

South Texas Oil Co.'s No. 1 State of Texas, carried by some as No. 1 Laurel, in Block 10 of Survey 270, Webb County, an east offset to the Rosenberg discovery well of the Laurel Field, is in sand at from 2,261-67 feet for 1,000 bbls. daily, getting the sand 20 feet or so lower than in the discovery well and four times bigger production and no water showing, features that make the field look better though it looked good before.

South Texas Oil Co. (Rosenberg) is to drill four more tests at once in the acreage east of his producers which due to a vacancy is on land belonging to the State of Texas.

Jacob Pool Extended

Longhorn Oil Co. has extended the Jacobs Pool in northeastern McMullen County about a mile to the southeast with No. 1 Lark, a producer at 1,027 feet. It is lower by some 40 feet than the group of six wells which thus far constitute the field and has no water. It came in making heads and the volume gradually increasing much as did the discovery well of Jacob, Buzzini & Pickett which later got up to around 100 bbls. daily.

Lefevre and Ballard are drilling No. 1 Jacob more than a mile to the southwest and if it comes in a producer it will give the new pool considerable extent.

Jacob, Buzzini & Pickett have organized the Cardinal Pipe Line Co. and will lay a 14-inch line from the field to Whittsett, about 7 miles east. Thus far the production is being trucked to Whitsett and shipped by rail.

There has been some wildcatting around this pool at some distance from it with the idea of picking up production but the two tests mentioned are the only ones reasonably close. Brown & Whitting's No. 1 Lasater, about 4 miles east, has a sand and an odor of gas at 1,084 feet, and J. H. Durbin's No. 1 Marbach, 4 or 5 miles northeast of the Jacob Pool, at 903-08 feet, has quite a little showing of oil but they may have to abandon the hole and drill another. Also Jim Harper, a little north of Fant City and 10 miles away from the field, at 1,100 feet, is working to bring in a well with a good showing of oil.

Refined Products Market Is Steady on East Coast

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wagon market, and distributors reported continued activity, with consumers coming back into the market for replacement supplies as a result of the recent spell of cold weather.

Paraffin Wax

The spot market has again eased off under selling pressure and lack of demand, and quotations were lower on all grades except 135-137 a.m.p. fully refined, which was maintained at 4½ cents per pound under limited offerings.

Spot 120-122 a.m.p. fully refined was offered at 2⅜ cents a pound, a drop of one-quarter cent, with 125-127 a.m.p. at 2¾ cents, off an eighth, 130-132 a.m.p. at 3½ cents, down a quarter, and 133-135 a.m.p. at 3⅞ cents, which represented a decline of a quarter cent.

Domestic buyers were ordering in limited volume for November delivery, but were not anticipating their requirements beyond that period, and export inquiry, which had shown signs of improvement in recent weeks, had again eased off.

Gulf Export Market

Suppliers had again revised their prices upward last week, and the increase served effectively to shut out foreign demand, temporarily at least, pending establishment of the new price basis. U. S. Motor for export was posted at 4¾ cents, up one-quarter cent, with 60-62 400 endpoint, and 61-63 390 endpoint, nominal at 4¾ to 4⅞ cents. For 64-66 375 endpoint, sellers were firm at 5 cents, a jump of one-quarter cent and a half cent over prices quoted a fortnight ago. The export market for kerosene was firm at the Gulf, with prices unchanged.

Export prices on major refined products have been sharply advanced at the Rumanian export terminal at Constanza. While no details surrounding the causes for these advances have been received here, it is believed the increases mark the first reflection of the recent regulatory compact entered into between the Rumanian oil industry and the Anglo-European group of oil companies which some time ago concluded in Paris negotiations for a plan of mutual co-operation in stabilizing certain world petroleum markets.

Central West Fields

(Continued from Preceding Page)

In Stark County the East Ohio Gas Co.'s No. 6 on the T. K. Harris farm, Section 26, Jackson Township, is a fair gas well in the Clinton at 4,446 feet. Same company is drilling a second test on the John Wyles farm, Section 13, same township, and has a rig in for No. 1 on the Edward A. Frank farm, Section 14, same township. Brendal Producing Co. has a rig on the Albert Tesch farm, Section 22, same township. East Ohio Gas Co. has a rig on the Hoover Co. property, Section 18, Plain Township.

In Guernsey County, E. C. Quillan and others' test on the Elmer E. Hamilton farm, Section 10, Wheeling Township, is reported good for 25 bbls. from the Niagara lime from 3,590-95 feet. Ohio Fuel Gas Co. has a gas well in No. 1-5,672 on the Frank L. Decker farm, Section 8, same township. Wilber Keith is drilling on the Charles Muhlbeck farm, Section 13, Jefferson Township, same county.

In Belmont County, Union Township, the O. K. Oil & Gas Co. is drilling No. 2 on the E. and E. Brown farm, Section 35. Wood and others are drilling on the Walter Rudolph farm, same section.

East Ohio Gas Co. is drilling No. 1 on the E. and E. Frank farm, Section 23, Jackson Township, Stark County.

Wittmer Oil & Gas Co. is reaming hole in No. 1 on the H. G. Reibel farm, Lot 90, Farmington Township, at a depth of 3,420 feet. Morse Oil & Gas Co. is drilling No. 1 John E. McCamey farm, Section 3, Gustavus Township, same county, at 3,670 feet. Wittmer Oil & Gas Co. is drilling at 200 feet in No. 1 on the E. and E. Stover farm, Lot 46, Bristol Township, same county.

ILLINOIS

In Illinois there was but one well completed, Frank Allison and others' test on the Abe Pleasants farm, in the NW Section 36, Robinson Township, Crawford County, which produced an initial of 5 bbls. at a total depth of 1,180 feet. W. C. McBride, Inc., is drilling on the Rayman Oldham farm, Section 3, Montgomery Township, same county. Warne Brothers are drilling No. 1 Grant Jessup farm, Section 23, Honey Creek Township, same county, and Jones and others have a location on the C. A. Taylor farm, Section 2, same township. In Oblong Township, same county, the Ohio Oil Co. abandoned No. 3 on the W. E. Mitchell farm, Section 17. Kewanee Oil Co. abandoned Nos. 12, 13, 14 and 15 on the C. Baldwin farm, also in Section 17, same township. Marks & Craft abandoned No. 1 M. Skaggs farm, Section 31, same township, and H. C. Kraft abandoned Nos. 1, 2, 5, 6 and 9 on the John Wall farm, Section 9, same township.

KENTUCKY

Kentucky reported very few wells during the week, the best being drilled by Charles Leeper on the Tucker farm, in the Barretts Hill Pool, in Ohio County, the initial production being 125 bbls.

H. L. Ogle and others' test, 300 feet from the south line and 1,000 from the east line of the I. T. Westerfield farm, in the Friendship Pool, same county, was dry.

In Daviess County the Kentucky Natural Gas Co.'s test, 150 feet from the north line and 600 feet from the west line of the H. C. Holbert farm, a mile west of Whitesville, is reported a dry hole at 850 feet. Creek Drilling Co.'s test in the northwest corner of the John Cootz farm, in the Habit Pool, was a dry hole at a total depth of 1,040 feet. F. M. Ashby and others also found a dry hole on the Holbrook & Simpson farm, 2 miles northeast of Whitesville.

In Henderson Couny, Niagara Pool, the Imperial Oil & Gas Products Co.'s No. 5 on the S. A. Freeman farm, is reported around 15 bbls.

Report from Christian County is that the United Petroleum Corp. struck a gas producer on the Petch farm.

Tulsa Bank Officials Hosts at T-Bone Ranch

Elmore F. Higgins, president, and Walter Ferguson, vice president, of the Exchange National Bank of Tulsa, were hosts to a number of prominent members of the oil fraternity on a week's duck hunt at the famous T-Bone Ranch, near Cherokee, Okla., last week.

The ranch comprises 16,000 acres, situated on the great Salt Plains of Alfalfa County, and has for many years been noted as the finest inland duck shooting in the country. It is owned by Howard Baker, and has been the scene of many very notable gatherings. It was the scene several years ago of a great hunt participated in by Irvin Cobb, Rex Beach, Roy Howard, Ray Long and Dean Parker.

Among the well-known figures in the oil industry who were guests on the trip were Ken Winship, vice president Gypsy Oil Co.; A. Jacobson, president, and Allmond Blow, vice president Amerada Petroleum Corp.; Frank Pryor president, and Eddie Bullard, vice president, Stanolind Oil & Gas Co.; E. E. Kirkpatrick, Slick Estate, Inc.; George W. Snedden, British-American Oil Co.; Ernest L. Connelly, Larkin Torpedo Co.; Henry Phillips, president, Sinclair Prairie Oil & Gas Co.; Z. G. Hopkins, M-K-T Railroad; Gov. George Hamilton, Federal Reserve Bank, Kansas City; D. L. Frawley, vice president Barnsdall Oil Co.; John B. Doolin, Federal Reserve Board, and United States Senator Elmer Thomas.

Despite unfavorable weather and hastening the season, the group got a fine bag of duck.

Northeastern Colorado Test Core Bleeding Oil; Failure Reported in South Dakota Wildcat

By TOLBERT R. INGRAM
Staff Correspondent, Rocky Mountain Area

DENVER, Colo., Oct. 31.—The Skelly Oil Co.'s No. 1 McKinley, an outside well in the northern part of the Hobbs Pool, was completed for 3,402 bbls. per day. One location was made by the Humble Oil & Refining Co. Two locations were made in the Artesia area in Eddy County.

Interest in northeastern Colorado was revived when W. R. Ramsey's test in Weld County recovered a 5½-foot core bleeding oil from the Muddy sand. One new operation was reported in the old Florence Field. There were no completions in Colorado.

In Wyoming, one well flowing at the rate of 250 bbls. per day was completed in the Osage Field, one was abandoned, two others are scheduled to be abandoned and two new operations were reported. The Mutual Oil Syndicate is completing a small gas well in Carbon County.

In Montana, R. C. Tarrant's No. 1 Reickhoff, in the Cut Bank area in Glacier County, is expected to do better than 100 bbls. Two new operations were reported in that district. The Ohio Oil Co. had two failures in the Lakota on the Dry Creek Dome in Carbon County, and both are plugging back to the Lakota. Two small wells were completed in the Kevin-Sunburst Field.

South Dakota reported one failure. Washington and Utah operations showed only routine progress.

NEW MEXICO

Lea County

One completion and one new location were reported in the Hobbs Pool. Skelly Oil Co.'s No. 1 McKinley, SW NW NW Section 20-18-38, an outside well in the northern part of the pool, was completed at a total depth of 4,238 feet and gauged 3,402 bbls. of oil and 2,396,000 feet of gas, open flow, the first 24 hours. Through the tubing at 4,145 feet, it gauged 2,689 bbls. and 1,761,000 feet. It topped the brown lime at 2,930 feet. The location of this well is half a mile east of Tidal Oil Co.'s No. 3 Hardin and one-third of a mile to the north and west of the California Co.'s No. 1 McKinley, the nearest producers.

The new operation is Humble Oil & Refining Co.'s No. 2-B Bowers, SW NW SE Section 20-18-38.

Gypsy Oil Co.'s No. 1 Hardin, SW cor. SE Section 18-18-38, is drilling at 1,050 feet in the red beds. The 13⅜-inch was cemented at 211 feet with 180 sacks. Same company's No. 2 Grimes (East), C SE NE Section 33-18-38, is bottomed at 3,955 feet and running the 7-inch.

Republic Oil Co.'s No. 2 Grimes, SW SE NW Section 28-18-38, is spudding, and Getty Oil Co.'s No. 5 McKinley, NE cor. Section 30-18-38, is bottomed at 925 feet in the red beds. The latter set the 12½-inch at 247 feet with 200 sacks. Amerada Petroleum Corp.'s No. 2 Hardin, SE cor. SW Section 18-18-38, cemented the 12½-inch at 228 feet with 200 sacks. Humble Oil & Refining Co.'s No. 1-B Bowers, NW cor. Section 29-18-38, cemented 7-inch at 4,000 feet with 300 sacks. Shell Petroleum Corp.'s No. 3-B McKinley, SW cor. Section 20-18-38, is bottomed at 3,980 feet and cemented the 7-inch with 250 sacks.

Midwest Refining Co.'s No. 11-X Turner, NE cor. SW Section 34-18-38, in the Hobbs Townsite, spudded October 20. Its No. 11 Byers, C NE NW Section 3-19-38, has redrilled to bottom of old hole at 1,630 feet where it cemented the 10¾-inch with 75 sacks. It topped the anhydrite at 1,550 feet. Midwest's No. 29 State, C SW NW Section 10-19-38, cemented the 10¾-inch at 1,568 feet with 75 sacks and is waiting. It topped the anhydrite at 1,555 feet.

In the Lea area, The Texas Company's No. 3-A State, C Lot 2, Section 2-21-33, which has been testing production at a total depth of 3,783 feet, is averaging 160 bbls. of oil and 17 per cent water on the pump. It may be deepened. Same company's No. 1-B Lynch, C SW NW Section 34-20-34, is bottomed at 1,160 feet and redrilling at 730 feet, and its No. 2-A Lynch, C SE SE Section 34-20-34, has derrick completed.

In the Lovington area, to the northwest of the Hobbs Pool, Western Drilling Co.'s No. 1 State, NE cor. SE Section 13-17-36, cemented the 8¼-inch at 3,465 feet with 25 sacks and is waiting. It is in the top of the brown lime.

Eddy County

Two new locations were reported in the Artesia area. Flynn, Welch & Yates' No. 64 State is in the SE NE NW Section 10-19-28, two locations north of its No. 63 State, and the same firm's No. 65 State, NE SE SE Section 30-18-28, is a location. Same firm's No. 63 State, SE cor. NW Section 10-19-28, is shut down for orders at 2,196 feet with considerable junk in the hole.

W. A. Scott's No. 1 Kaiser, NW SE Section 7-18-27, southwestern Artesia area, is drilling at 1,570 feet in gray lime. Finley, Woods & Brainard's No. 5 Brainard, C NW SW Section 5-18-27, is drilling at 1,068 feet in gypsum and lime. It had fresh water at 910-1,010 feet and artesian water at 1,025 feet which rose to within 150 feet of the top in the 8¼-inch, which is being carried at 1,025 feet.

R. Spearow and others' No. 1 McClelland, SW NW NE Section 22-22-23, west of Carlsbad, is drilling at 563 feet in lime. Leonard & Levers' No. 8 State, C SE Section 21-17-29, Jackson area, is drilling at 2,192 feet in lime after running the 6⅝-inch.

De Baca County

Landowners Oil Co.'s No. 1 State, SW cor. NE Section 16-1s-27, Buffalo Creek, is drilling at 5,183 feet in lime.

Chaves County

R. D. Compton's No. 1 Emerson, SW cor. SE Section 20-10-24, near Roswell, is drilling at 1,460 feet, and Warman Oil Trust's No. 1 Weldon & Hoar, NW cor. SE Section 9-14-25, Blackdom district, spudded to 30 feet and shut down for boiler repairs.

Bernalillo County

Norins Realty Co., Inc.'s No. 1 Pajarito grant, NW cor. NE Section 22-9n-1e, is rigging up cable tools to resume after cementing 10-inch at 3,365 feet, and its No. 1 Gallegas grant, C NW NW Section 19-11-4e, is rigged and ready to spud.

Guadalupe County

New Mexico Exploration Co., Ltd.'s No. 1 Anton Chico grant, NE cor. SW Section 20-9n-17, is drilling below 325 feet in lime and sand.

Valencia County

Western Natural Resources Corp., Inc.'s No. 2 San Clemente grant, SW cor. NE Section 5-6n-1e, is drilling below 1,900 feet and is 200 feet below where No. 1, three-fourths of a mile to the south, was abandoned in an igneous intrusion. Homer C. Mills, Inc.'s No. 1, C NW SW Section 29-6n-3e, Tome grant, is shut down at 501 feet. It had a show of oil at 320 feet and a small rig is being used to drill No. 2, C SE SE Section 9-6n-3e, which will test the sand containing the show in No. 1.

San Juan County

R. C. Oswell's No. 3, NE NE Section 33-30-11w, near Aztec, is shut down for repairs at 1,050 feet. Fred Barrett's No. 1 Hart, Section 11-29-11, Fulcher Basin, is rigging up. Kutz Canon Oil & Gas Co.'s No. 1 Day, SW cor. Section 20-28-10, Kutz Canon district, is drilling at 3,807 feet after cementing the 5⅛-inch at 3,797 feet.

COLORADO

Weld-Morgan Counties

Interest in the northeastern Colorado area was revived on a considerable scale the past week when W. R. Ramsey's No. 1 Tighe (St. Anthony), SW NE SE Section 15-7n-59, in the New Raymer-Buckingham district in Weld County, cored 5½ feet of heavily saturated oil sand in the Muddy formation. The operation then shut down to run 7-inch and test the horizon. It probably will be the first of next week before further drilling will take place. Top of the Muddy was encountered at 6,685 feet. Three inches of dark gray sand was cut and then 6 inches of shale. The core then showed sand and shale to 6,689 feet with a small show of gas. The next 2½ feet showed a porous sand containing gas which was followed by hard sand to 6,692 feet. From that depth to 6,697½ feet there was a very porous soft sand from which the core came out bleeding oil and showing some gas. The next 3 feet showed sand and shale alternating with the sand predominating and containing shows of oil and gas. The last 3 inches to 6,700½ feet was very hard sand. Operations were then suspended to run 7-inch to the top of the sand at 6,685 feet. The general opinion is that the well will be a commercial producer, but how large can not be now estimated. The size of the well will depend largely upon whether more porous sand will be found upon drilling deeper. With the exception of 300 feet of 15½-inch, the hole was drilled entirely without casing. The well is 13 miles northeast of the Greasewood Pool in which there are three producing wells. It was the Greasewood discovery two years ago which brought a number of major companies into that part of the state. While several deep tests were drilled at widely separated intervals, none of them resulted in a commercial discovery, although several had good shows. The Ramsey test is a little off of and to the west of the high mapped by the U. S. Geological Survey in 1924. It is in a district, however, where considerable leasing has taken place. Major companies have more than 100,000 acres in this district, mostly to the north. Fort Morgan Oil Co. has a block of 20,000 acres 8 miles to the southeast. Tulsa-Fort Morgan Petroleum Corp. has a block to the north and drilled a test through the Hygiene to 3,250 feet 5½ miles north of the Ramsey well. This test then shut down until the Ramsey well was completed. The Ramsey block comprises 6,800 acres. Greeley Oil Co. has an interest in the well, having furnished the derrick and considerable equipment. Superior Oil Co. and Danciger Oil & Refining Co. did not participate as originally reported. The results in the Ramsey well already are sufficiently encouraging to insure additional prospecting in that territory and several tests are almost sure to be drilled next spring regardless of the outcome.

Ohio Oil Co.'s No. 1 Butters, C SW SW Section 7-6n-60, a mile northeast of the nearest producer in the Greasewood Pool, does not look so encouraging. After having a good show of oil in a few feet of the Muddy sand, it drilled deeper and topped the Dakota at 6,759 feet. It drilled 1 foot into that sand and encountered water. Efforts are being made to plug back to the Muddy, topped at 6,683 feet, and give that horizon a further test.

The only other active operation in Weld County is Retter Oil Co.'s No. 1 Cronin, NW cor. SW Section 24-1n-66, Brighton-Lupton district. It has resumed at 625 feet to test a shallow sand at 800 feet. Its No. 2 Cronin, CWL NW SW Section 24-1n-66, is shut down at 795 feet with the tools in the hole.

Adams County

Hills Dome Oil Lease Development's No. 1 Hills, SE cor. Section 27-3s-64, Watkins district, is drilling at 4,070 feet in sandy shale which gives off an odor of oil.

Fremont County

One new operation in the old Florence Field is reported in S. W. Pressey's No. 1 Mojada, on the Mojada camp ground near the intersection of the southerly line of Main Street with the east line of the United Oil Co.'s addition to Florence. It is spudding.

Rio Blanco County

The California Co.'s No. 1 California-Raven, NW SE Section 30-2n-102, Rangely Dome, is coring at 6,303 feet. It stopped at 6,228 feet to test numerous shows starting at 5,781 feet, but these were not commercial.

Magnolia Petroleum Co.'s No. 1 Titley, NW cor. SW Section 15-2s-96, Picenance Creek, is drilling at 2,338 feet in brown and gray lime.

WYOMING

The Department of the Interior has modified its regulations requiring holders of permits on government land to give bond through bonding companies exclusively to guarantee prospecting in accordance with the permits. The new regulations permit the acceptance of bonds from private companies or individuals providing they can qualify as to property requirements. The old regulations made the giving of bonds exceedingly difficult as some of the bonding companies made the conditions almost impossible. The desirability of a change was brought to the attention of the department by A. J. Hazlett, editor of the Inland Oil Index, and others.

Weston County

Julius Peters and others' No. 1 Witzell, SE cor. NW Section 30-46-64, Fiddler Creek, to the southwest of the Osage Pool, is bottomed at 4,590 feet, and drilling on bridge. Considerable oil is showing in the hole, coming from the Muddy sand, which was shot and it is believed the well will make a small pumper. It is probable another test will be drilled by the same interests in the spring on the Egert tract in the east half of Section 19-46-64.

One completion, one well abandoned and two others scheduled to be abandoned were reported in the Osage Field. General Oil Co.'s No. 4 Garrott, NE SE SE Section 15-46-64, found the sand at 2,085-

2,100 feet and filled 1,200 feet over night. It was then deepened a few feet and given a small shot. It started flowing at the rate of 250 bbls. per day and is expected to settle to a good well. Tug Oil Co.'s No. 2, NE NW SW Section 15-46-64, was deepened to 2,976 feet without picking up any more sand and probably will be abandoned. It had sulphurous salt water at 2,875-89 feet. Wyoming-Dakota Oil Co.'s No. 1, SE SW NE Section 15-46-64, which found the sand at 2,185-93 feet last month and looked good for 50 bbls. per day, was deepened to 2,215 feet and abandoned dry. Central Oil Co.'s No. 1, NE cor. SW Section 15-46-64, which also had salt water, is shut down and probably will be abandoned.

Two new operations were reported as follows: Chadron-Osage Oil Co.'s No. 18, NW SW SW Section 14-46-64, is drilling at 400 feet, and Lincoln Oil Syndicate's No. 1, SW SE Section 10-46-64, is rigged and ready to spud.

Routine operations include the following: General Oil Co.'s No. 1-A, SW cor. NW Section 15-46-64, is skidding rig from No. 1, in which the hole was lost, and Sandell and others' No. 2, SE SW Section 12-46-64, is drilling at 1,200 feet. Paymac Oil Corp.'s No. 1 Toyne, SE NW NE Section 3-46-64, is drilling at 1,300 feet, and Albert Jones' No. 3, NW cor. SE Section 21-46-63, is shut down at 400 feet. M.S.&W. Co.'s No. 13, SW SE NW Section 30-46-63, set the 8¼-inch at 400 feet and shut down. Riggs Oil Co.'s No. 2, SE NE Section 14-46-64, is drilling at 3,060 feet.

Niobrara County

Interstate Oil & Refining Co.'s No. 1 Globe, SW cor. SE Section 2-39-61, West Mule Creek, is drilling below 1,600 feet with the Madison lime as the objective.

Converse County

Continental Oil Co.'s No. 30 Glenrock Sheep, SW SE SE Section 4-33-76, Big Muddy, is drilling at 4,660 feet in the top of the Sundance formation and is showing some oil and gas. It is not yet in sand. Ohio Oil Co.'s No. 25 Kinney, SE SW SE Section 4-33-76, is shut down at 4,320 feet until No. 26 is completed. The last named will be drilled to a stray sand encountered at around 1,400 feet in No. 25, but which was mudded off. It is located adjoining the deep test and the same rig will be used. No. 25 is on top of the Lakota. John Ackard's No. 1 Morton, SE cor. Section 24-33-72, southeast of Douglas, was abandoned at 2,100 feet, where it encountered a crevice.

Platte County

T. R. Oberman's No. 1 Diamond ranch, NW SE Section 30-21-68, 14 miles west of Chugwater, is spudding at 50 feet.

Natrona County

Mutual Oil Syndicate's No. 2, C SW SE Section 14-35-79, Midway Dome, was deepened 1 foot to 6,075 feet, making 31 feet of saturated Muddy sand very fine and tight. It was given a small shot of 15 quarts and is cleaning out preparatory to running tubing and giving it a pumping test. The shot appeared to have increased both the oil and gas.

Fremont County

The Texas Company's No. 2 State-Ridgway, SE SW SW Section 36-34-95, Alkali Butte, is drilling at 4,135 feet. The Big Four Oil Co., which recently acquired the Enos tract of 81 acres in the Pilot Butte Field, is drilling in its No. 1 Enos, SE NW Section 27-3n-1w, at 794 feet. It will go to the second sand at 900 feet. There are three or four shallow wells on the tract. Yellowstone Oil Co.'s No. 1 Gabus, SW cor. Section 14-38-94, Shoshoni district, has fished out most of the drill pipe at a total depth of 2,210 feet. Cable tools have been substituted for rotary. Ward Oil & Gas Co.'s No. 2, NE cor. Section 28-34-90, Dutton Basin, has recovered drill stem and is fishing for bit. Total depth is 4,150 feet.

Carbon County

Mutual Oil Syndicate's No. 27, NW SE NE Section 12-18-78, Dutton Creek, tested the Shannon sand at 1,689-1,762 feet. It gauged better than 500,000 feet per day with a rock pressure of 470 pounds. It is drilling deeper and at 1,800 feet showed a considerable increase. The discovery well and No. 31 Eades, both to the north of this operation, oil wells in the Muddy, made a test of the Shannon gas. One gauged 1,250,000 feet and the other 500,000 feet. The rock pressure was 480 pounds. An ample supply of gas for Laramie is assured and will be transported to that city. The construction will require two short 8-inch lines in the field and at Laramie to connect up with Ohio Oil Co.'s line from Rock River to Laramie. The Laramie Gas Co. will be the distributor. Approximately $750,000 will be expended in converting the system and replacing old pipe.

Ohio Oil Co.'s No. 1 Carbon, NW Section 18-18-77, Dutton Creek, is drilling at 1,075 feet.

Sweetwater County

Mountain Fuel Supply Co.'s No. 1 Mullen, SE cor. NW Section 2-17-104, South Baxter Basin, is standing with the 6⅝-inch cemented at 2,275 feet.

Hot Springs County

The Empire State Oil Co. is spudding in a well to be drilled to the Embar in the NE NW Section 14-44-98, Hamilton Dome.

MONTANA

Glacier County

R. C. Tarrant's No. 1 Reickhoff, SE SW NE Section 3-34-6w, Cut Bank, the most northwesterly of the group of wells drilling in that area, is swabbing to test and looks as if it will be the best well so far completed in that district. Estimates place the initial production at better than 100 bbls. per day. It topped the sand at 2,921 feet and was drilled to 2,962 feet. Due to the collapse of the 6⅝-inch, it was necessary to run a string of 4½-inch. The oil tests 38.2 degrees gravity. Two new locations were reported. A. P. Consolidated Oil Co.'s No. 1 Matson, NE SE NW Section 14-34-6w, close to No. 1 Haglund, is moving in, and Hannah-Porter Co.'s No. 1 Britton, C SW SW Section 14-34-6w, is a location.

The Texas Company's No. 1 Fisher, C S half SW Section 10-35-5w, is drilling at 1,520 feet. B. E. Adams and others' No. 1 Britton, SE cor. NE Section 14-34-6w, set surface pipe at 520 feet. R. C. Tarrant's No. 1 Barnes-Butler, NE cor. Section 24-34-6w, set the 15½-inch and is drilling ahead. His No. 1 Britton, NE cor. SE Section 14-34-6w, is drilling at 300 feet, and his No. 1 McLellan, C SE Section 7-34-5w, is drilling below 350 feet. Tarrant's No. 1 Haglund, Sr., NW SW NW Section 13-34-6w, landed 10-inch at 1,850 feet and is drilling. His No. 1 Yunck, NW cor. Section 12-34-6w, is drilling below 2,550 feet after running the 8¼-inch. Montana Power Co.'s No. 1 Simereo, C N half, Section 5-33-5w, is drilling below 2,450 feet. Santa Rita Oil & Gas Co.'s No. 1 Yunck, NE cor. NW Section 23-34-6w, is drilling at 2,550 feet, and its No. 2 Yunck, NE cor. SE Section 24-34-6w, is drilling at 1,050 feet.

Carbon County

Ohio Oil Co.'s No. 11 Bowman, C SE NE Section 4-7s-21, Dry Creek, drilled deeper into the Lakota and encountered water. It is plugged back to the Dakota. The upper part of the Lakota at 5,928 feet showed considerable oil. This well is on the northwestern flank of the structure. Same company's No. 7 Robinson, C SE SE Section 3-7s-21, is plugging back to the Dakota from the Lakota at a total depth of 5,753 feet. Carbon Oil & Gas Co.'s No. 1 McMinn, NW SW SW Section 7-7s-22, is drilling at 5,270 feet with the Dakota as the next objective. Corbett Royalty Co.'s No. 1, SW cor. SE Section 1-6s-23, Blue Creek, is drilling at 1,225 feet, and Jack Creek Oil Co.'s No. 1-A, SW NE SE Section 15-7s-23, Jack Creek, is drilling at 1,235 feet.

Toole County

Pfabe & Engleking's No. 4 Seabrook, SE SE Section 19-35-2w, Kevin-Sunburst Field, was completed as an average well below 1,500 feet. William Hewson's No. 1 Van Note, NW NW Section 30-35-2w, is estimated at 20 bbls. initial from sand at 1,511-19 feet.

Yellowstone County

Peter Antonili's No. 1, NW cor. NE Section 21-2n-25, Happy Hollow, has resumed after running the 5⅜-inch at 2,470 feet.

SOUTH DAKOTA

Lakota Development Co.'s No. 1 Knude, SE SE Section 20-10s-4e, Fall River County, is reported to have suspended at 3,030 feet where it encountered a large flow of water.

UTAH

Utah Southern Oil Co.'s No. 1 Balsey, C NE NE Section 31-23-21, Grand County, has sidetracked tools, cemented them in the wall and is ready to resume at 6,065 feet. Ramsey Petroleum Co.'s No. 1 Senior, C NE SW Section 18-26-7e, Last Chance Dome, Emery County, is drilling below 400 feet.

WASHINGTON

Ohio Oil Co.'s No. 1-A Robinson, Section 5-17-9w, Gray's Harbor County, is coring at 5,790 feet. Mordello L. Vincent and others' No. 1 Rosalie, Section 9-28-13w, Forks district, Clallam County, is reported drilling at 850 feet in hard sandstone with occasional shows of oil and gas. Simcoe Oil Co.'s No. 1, NW NW Section 24-11-17, Simcoe Indian Reservation, Yakima County, is shut down at 2,760 feet. Jansen Drilling Co., which recently took contract to complete, is expected to resume this week. Olympic Petroleum Corp.'s No. 1 Sims, Section 12-26-14, Hoh River district, Jefferson County, is shut down at 2,069 feet waiting on negotiations for a joint test by Los Angeles companies. This operation was taken over recently from the Leslie Petroleum Co.

Show of Light Crude at 29 Feet in Alberta; Shallow Drilling in Central Turner Valley

By VICTOR LAURISTON
Staff Correspondent, Canadian Fields

CHATHAM, Ontario, Oct. 29.—In the old Oil City Field of southwestern Alberta, Oil City Royalties' No. 1, Section 30-1-30w4, which spudded in only a few days ago has encountered a first show of light crude at 29 feet. The show appears to be noncommercial, and the test is being drilled deeper.

The Oil City Field was the scene of Alberta's first oil boom some 30 years ago, and Oil City Royalties' No. 1 is located about 50 feet from the original discovery well, drilled by John Lineham and associates of the Rocky Mountain Oil & Development Co. in 1901 and 1902. In the early days of Alberta, when the present Waterton Lakes area was a heavily timbered wilderness, oil was discovered on the surface of Cameron Creek, and one Bill Aldridge, a squatter, carried on a considerable business skimming the oil from the creeks, treating it in a primitive refinery, and selling the product to the Mormon settlers about Cardston for lighting and medicinal purposes. Mr. Aldridge built up a sizeable fortune which he lost later in the subsequent oil boom.

The first test was drilled by the Rocky Mountain Development Co., organized by John Lineham and associates of Calgary. It struck what was apparently a pocket of high grade crude at comparatively shallow depth. It is claimed the well flowed 300 bbls. a day with the tools in the hole. Later the flow was shut off by paraffin or caving. The well was ultimately carried to 1,020 feet and appears to have had a fair pumping production.

Information compiled by the Alberta land and mines department recently indicates that the discovery well got water flows at 600 and 900 feet, some slight shows of gas and oil shows above 780 feet, between 780 and 900 feet, and at 1,020 feet. The oil was a 39 gravity crude.

The discovery started a boom as a result of which drilling operations were carried on intermittently till about 1907. The Rocky Mountain Development Co. drilled two other wells. Three were drilled or located by Western Coal & Coke Co. and four by the Western Oil & Coal Co. and two by the predecessors of the latter company, Canada Oil & Mines, Ltd. Pincher Creek Oil & Refining Co. started at least five wells, of which two are definitely known to have got oil showings. Owing to the isolated nature of the district, the high cost of drilling and the lack of any convenient market for crude when it was developed, operations were ultimately abandoned and the various companies passed out of existence. In 1919 the Original Discovery Oil Co. of Calgary drilled a test in LSD 16, Section 30-1-30w4, reaching a depth of 1,020 feet; gas shows were met above 800 feet and traces of oil appeared almost continuously.

The present Oil City Royalties, Ltd., was organized by Miss Theo F. Grewer of Vancouver and L. R. Patrick of Calgary, son of A. P. Patrick, one of the original promoters of the pioneer Rocky Mountain Development Co. The company has drilling equipment valued at $40,000 on the ground and is planning to give the old field a thorough test. A report made some time ago by E. H. Cunningham Craig indicates the prospect of a fair commercial production if drilling is carried to sufficient depth. Andy Rutherford is in charge of the drilling, and standard tools are being used.

North Turner Valley

In the North Turner Valley, Model Oils' No. 2, LSD 16, Section 22-20-3w5, is redrilling and sidetracking below 3,475 feet. The original test ran into drilling difficulties at 3,952 feet. United Oils' No. 4, LSD 2, Section 24-20-3w5, is reaming below 5,250 feet.

South Turner Valley

In the far south end of the South Turner Valley Field, Mar-Jon-Freehold's No. 1, LSD 9, Section 28-18-2w5, is drilling below 5,465 feet. The test appears to have got the top of the Madison around 5,420 feet, and if this is verified by later drilling, casing will be cemented around 5,500 feet before drilling into the wet gas horizon. It is planned to finish the hole with 5⅝-inch casing. The test is expected to get production somewhere above 5,800 feet. Drilling is being handled by the Union Drilling Co. of Calgary.

In the Mercury area, farther north, Canadian Royalties' No. 1, LSD 9, Section 5-19-2w5, is drilling below 3,065 feet. The rig and camp buildings are being prepared for winter drilling, and the outfit will put on a second tour.

Central Turner Valley

In the Central Turner Valley, McLeod Oil Co.'s No. 4 deep test, LSD 16, Section 1-20-3w5, is drilling below 7,659 feet after passing out of a hard formation which slowed up progress considerably. At this depth the test is 3,929 feet below the top of the Madison lime and 1,059 feet below the previous record drilling depth for Canada. McLeod Oil Co.'s No. 1, same LSD, which went off crude naphtha production from the Madison about six months ago, is reported to have come back into production with a good wet gas flow.

Bow Oils' No. 1 (formerly Illinois-Alberta's No. 1), LSD 14, Section 12-20-3w5, is cleaning out approximately 140 feet from the old bottom, in an effort to restore crude naphtha production from the deep lime.

Tests of Shallow Horizons

In the Central Turner Valley, New McDougall-Segur Oil Co.'s No. 5, LSD 14, Section 12-20-3w5, is reported giving a settled production of somewhat more than 40 bbls. a day of light crude from the McDougall-Segur sand at 2,880 feet. Owing to the comparatively small cost of testing to the shallow horizon, around $11,000, the well is expected to pay for itself in a short time. The company is planning to drill No. 6 as a test of the same horizon.

The results secured at New McDougall-Segur's No. 5 are leading a number of operators to consider shallow drilling projects in sections of the field where deep drilling tests have indicated a fair production in the shallow horizons. Last December the Alberta government, as a conservation measure, prohibited the drilling of new tests to the Madison lime; and deep drilling since then has been restricted to tests actually drilling at that time or to unfinished tests which had previously been carried to considerable depth. The Alberta government ruling, however, does not interfere with testing of potential oil horizons above the Madison, nor is the production from these horizons at all affected by conservation measures.

New McDougall-Segur's No. 5 was the first test undertaken in recent years with a shallow sand as the definite objective. A new test of the same type is to be drilled in the South Turner Valley by W. Fay Becker and associates of Calgary. The Becker syndicate has secured 40 acres offsetting Merland Oil Co.'s No. 1 producer to the west. The Becker Syndicate's well will be located 1,500 feet west of Merland's No. 1, directly north of Mar-JonFreehold's No. 1 deep test and in line between that well and Sterling Pacific Oil Co.'s No. 2. The acreage was secured from the Anaconda Oil Co. on a royalty basis and the test will be known as Anaconda's No. 2. Cellar for the new well is being dug and derrick will be erected at once, the test to spud in early in November. Location is close to the northeast boundary of the acreage in LSD 15, Section 28-18-2w5.

The definite objective of Anaconda's No. 2 will be the Dalhousie sand. Merland Oil Co.'s No. 1, located 1,500 feet east of the new test, got a phenomenal showing of wet gas in this horizon, with an initial crude naphtha or light crude recovery estimated at 100 bbls. a day. The initial wet gas flow was estimated at 30,000,000 feet. The flow was met at 4,424 feet, and while the crew was bailing the drilling fluid to make a production test, the gas caught fire. The gas production apparently blew out. Later Merland's No. 1 was completed as a result of an arrangement with Imperial Oil, Ltd., which carried the well to the crude naphtha horizon of the lime, from which a large and steady naphtha production has been secured.

Anaconda's No. 1 will be drilled to the Dalhousie sand unless a satisfactory light crude production is met in one of the upper horizons. This horizon, in the Fernie shales, was first productive in Dalhousie Oil Co.'s No. 5, the light crude production holding up much longer than that from any of the other crude oil horizons in the Turner Valley Field. The Becker interests were previously successful in completing Hylo Oils' No. 1 in Section 4-19-2w5; the Hylo well, financed by the sale of royalties, getting both light crude production from the Home sands and crude naphtha from the deep lime.

A number of other companies are reported to be studying the possibilities of the various shallow horizons, as indicated by showings encountered in deep tests drilled in various parts of the field. In the North Turner Valley area, United Oils' No. 4, LSD 2, Section 24-20-3w5, is redrilling to recover a light crude production previously encountered in the Dalhousie horizon.

Conservation Appeal Deferred

The appeal of Spooner Oils, Ltd., in connection with the Turner Valley conservation measures, which was to have been heard at Edmonton last week, has been further postponed. It will, according to present arrangements, come up for a hearing at the sitting of the appellate division of the Supreme Court of Alberta at Calgary on October 31. Spooner Oils, Ltd., which claimed that the act constituting the Turner Valley Gas Conservation Board is invalid, is appealing from a decision of Mr. Justice Ewing, who in trial court last June upheld the validity of the legislation.

Red Coulee Field

On the Montana end of the international Red Coulee structure, Askalta Oils' No. 8 Farbo, Section 2-37-4w, is reported drilling below 1,900 feet and should be brought into production early in November.

On the Alberta end, a syndicate backed by Calgary and Vancouver interests has taken over some acreage of the Capitol Oil & Natural Gas Co. of Vancouver, as well as Capitol's No. 1, in LSD 3, Section 21-1-16w4. This test suspended operations in 1930 after drilling to a depth of 2,752 feet. The location was north of the Vanalta group of producing wells, and the test, failing to get commercial production in the Vanalta sand, was carried a short distance into the Madison lime. The log shows the top of the Colorado at 300 feet, the Blairmore-Kootenay at 2,080 feet; the Ellis at 2,570 feet and the Madison at 2,680 feet. The Colorado was 80 feet deeper and the Blairmore-Kootenay 150 feet deeper than in the Vanalta discovery well farther south. Capitol's No. 1 encountered water in five horizons between 143 and 2,687 feet, the other shows including gas at 1,617 and 1,920 feet; oil at 2,480 feet; gas at 2,500 and 2,545 feet; and both oil and gas at 2,687 feet, in the top of the Madison. The new owners are pulling the 6-inch casing and will, it is understood, clean out and deepen the well for a test of the Madison, which was not drilled to a conclusive depth; the production possibilities of the upper horizons where oil shows were encountered may also be tested more carefully.

Moose Mountain Test

On the Moose Mountain structure, northwest of Turner Valley, Elbow Oils' No. 1, LSD 11, Section 35-22-5w5, is reported held up by caving at 3,645 feet. The test is now waiting for 8-inch casing.

Keho Lake Test

On the Keho Lake structure, southern Alberta, Hudson's Bay Oil & Gas Co.'s No. 1 Keho, LSD 2, Section 17-11-22w4, is redrilling below 4,878 feet after sidetracking lost tools; and carrying 6⅝-inch casing down behind the tools. The original hole was cased to 4,913 feet, a good oil show being met in the top of the Madison lime at 4,920 feet.

Twin River Operations

On the Twin River structure, the joint test of Nordon Corp. and C. A. Roney in LSD 11, Section 2-2-20w4, is expected to spud in about the middle of November. Location is three-quarters of a mile north of Parco Oil Co.'s No. 1 Twin River. Pat Adams, who had charge of the Highwood test, will look after the Twin River drilling.

Fort Norman Operations

Announcement is made by Imperial Oil, Ltd., officials in the Canadian West that Imperial's No. 2 Discovery well in the Fort Norman Field, on the Mackenzie River, will be again put on production next season. The well was opened this year and yielded about 20,000 gallons of gasoline and fuel oil, the output being limited by the small capacity of the refining outfit. No new drilling is contemplated in the near future as the combined output of the two producing wells in the field is enough to meet the needs of the North, even allowing for considerable development in the new Great Bear Lake mining field, which is the chief market.

Calgarians Testing Montana

A number of Calgary men are interested in the Browning Development Co. whose Tarrant-Heickoff well in the Cut Bank Field is reported to have encountered a flow of 41 gravity crude. The sand was topped at 2,921 feet and the test made at 2,960 feet when the drill was still in the pay. A 3½-hour swabbing test produced 60 bbls. The location is in Section 3-34n-6w on the Blackfeet Indian Reserve. Alberta Pacific Consolidated Oils, Ltd., of Calgary is reported rigging up on Cut Bank acreage; while Fred Mannix of Calgary is one of the partners in the Adams-Mannix-Britton test in Section 14-34n-6w, at last reports drilling between 600 and 700 feet.

Drilling in Manitoba

In the Manitou district, southwestern Manitoba, Commonwealth Petroleums' No. 2 Pembina Valley, LSD 2, Section 26-2-9wPM, is drilling below 2,602 feet with indications of a change in formation, after considerable trouble with caving. The test is thought to be close to the Winnipeg sandstone, the potential producing horizon.

British Columbia Test

In the Kelowna district, British Columbia, Okanagan Oil & Gas Co.'s No. 1, E half, Section 26-26-Osoyoos Survey, is reported deepening below 2,530 feet with indications of a slightly increased gas production.

Oil in Dawn Field

In the Dawn Field, Lambton County, Ontario, Union Gas Co.'s No. 4, Lot 24, Concession 2, has unexpectedly developed into an oil producer. Two previous producers a short distance southwest, Nos. 61 and 63, had got their production in a sand topped at 1,815 feet. No. 64 at 1,810 feet had only a small show of oil and at 1,900 feet was regarded as a dry hole. Drilling was continued and a sand was encountered, apparently in a different formation, between 1,930 and 1,965 feet. The maximum gas measurement in this sand was only 10,000 feet, and the gas has been so far insufficient to flow the oil, which has, however, risen over 500 feet in the well, and there is a slight possibility that a flowing well may develop with the accumulation of gas pressure. Drilling is being continued, it being planned to go completely through the sand and then plug back if necessary. The sand will probably be given a shot later.

Union's No. 63 has recovered lost tools and is cleaning out preparatory to a definite production test, and No. 61 is still cleaning out. The three wells, all oil producers, are spaced 600 feet apart along a northeast and southwest line. The two earlier wells got the producing sand at about 1,815 feet, No. 61 having a reported production of 25 bbls. a day with only a little gas and No. 63 being unofficially estimated at around 100 bbls., with a considerable gas production. Further drilling will probably be started as soon as the three wells are on a definite producing basis,

Sale of Western Service Sought in Federal Court

Immediate sale for $250,000 or more of the Guthrie franchise and properties of the Western Service Corp., a gas utility, was asked in a Federal Court petition filed at Oklahoma City.

The petition declared reorganization of the company, now in the hands of a Federal receiver, is at a standstill and that its properties soon may be depreciated greatly.

Charles Hill Johns, attorney who filed the petition, said he had found at least one prospective purchaser and that a bid of at least $250,000 would be offered.

The Guthrie assets of Western Service, consisting of a gas distribution system, a franchise, and a pipe line to the Oklahoma City Field, were ordered sold in September. The order was vacated when officers and preferred stockholders of the company asked time to reorganize and refinance the corporation, which has been in receivership for almost a year.

Logan Carey, receiver for Western Service, has questioned validity of the claims.

The petitioners pointed out that the Guthrie Gas Service Co. has obtained a competitive franchise in Guthrie and will sell gas at 38 cents per 1,000 feet, compared to the Western Service price of 43 cents.

S. J. CARPENTER DEAD

Stonewall Jackson Carpenter, 65, a former Texas Ranger who for the last 10 years has been an oil operator with leases in the Laredo, Tex., district, died in Laredo on October 18.

Carpenter was one of the discoverers of the Cole gas field in Duval County. He was survived by Mrs. Carpenter, a daughter and a brother.

W. J. COCHRAN DIES

OIL CITY, Pa., Oct. 31.—William J. Cochran, age 76, well known oil producer of Shafer Run, Oil City-Reno Road, died last week from a complication of diseases. He was ill for eight weeks. Born in Belfast, Ireland, he came to this country when 5 years old and spent the remainder of his life in this section.

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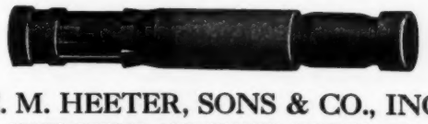
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Flow Test at Long Beach Is Getting Under Way; Kettleman Hills Controversy Yet Unsettled

By L. P. STOCKMAN
Staff Correspondent, California Fields

LOS ANGELES, Calif., Oct. 29.—Crude oil production in California, reflecting completion of the flow test at Santa Fe Springs and the subsequent pinching back of production, was substantially below the average for the previous week. State production is expected to register another upswing next week as a flow test involving the Long Beach Field is scheduled to get under way with the 7 a.m. gauge November 1. Considerable opposition has arisen to the proposed flow test, but the Executive Committee for Equitable Curtailment has definitely decided that both this test and the one to be conducted at Huntington Beach must be carried out. Opposition on the part of some Long Beach operators is undoubtedly due to the fact that the test will reveal their inability to reach their present rated potential. In some cases the objection is legitimate and made in good faith. Umpire Pemberton utilized the services of 124 field men at Santa Fe Springs but will undoubtedly find it necessary to increase the number during the course of the flow test at Long Beach. Approximately 1,100 wells are expected to participate in the flow test at Long Beach, many of which are located on town lots. Preliminary preparations have just about been completed, with the result that no great delay is anticipated. During the course of this preliminary work inspectors of the umpire's staff have checked up on pipe line connections and have calibrated quite a number of small flow tanks.

The principal problem confronting California operators at present is the necessity of immediately effecting stringent curtailment and the obligation of producers to absorb the overage produced during the course of the flow tests at Playa Del Rey and Santa Fe Springs. Long Beach and Huntington Beach operators will likewise be obliged to eliminate excess production upon the completion of the flow tests in their respective fields. J. R. Pemberton, state oil umpire, has written California producers that "unless production excesses are corrected early in November it is my opinion that it will be futile to expect the existing crude oil prices to continue during the coming month. In the event of a forced reduction in crude oil prices, at a time when the business of California is ill prepared for such a blow, it does not seem reasonable that the entirely innocent victims of a price collapse will endure with equanimity the actions of those whose persistent overproduction and nonco-operation are responsible for the plight of the industry." In conclusion he urges every operator, without exception, to restrict his November production to the allotment prescribed on the new proration schedule, which will be released some time within the next few days.

Kettleman Hills

The Kettleman North Dome Association is still standing pat on its refusal to effect the additional curtailment prescribed by the Executive Committee for Equitable Curtailment. The action of Kenda is having an adverse effect on the entire curtailment program and may ultimately precipitate a general show down. In fairness to Kenda, it might not be amiss to say, however, that operators in the Kettleman North Dome Field have rigidly adhered to curtailment during the past year, while several other fields were persistent offenders so far as observance of curtailment was concerned. The Union Oil Co. is expected to conclude drilling operations on No. 2 Amerada King within a day or two and an excellent well is anticipated upon its completion early in November. The Kettleman North Dome Association's deep test, which has already penetrated more than 2,000 feet of the Temblor, is drilling ahead at 8,450 feet. This project, No. 38-34 J, is the deepest well stratigraphically to be drilled in the North Dome up to the present. The North Kettleman Oil & Gas Co. is coring in No. 1 Lillis-Welsh at 9,370 feet and will probably continue taking frequent cores as the hole is getting quite deep and approaching the critical depth. This well, the most westerly project to be started in the North Dome, has taken on a rather dubious outlook, although it cannot, by any stretch of the imagination, be considered a duster. It still has a chance but does not look quite as hot as it did a few months ago. In the Middle Dome of Kettleman Hills, the Standard made substantial progress in No. 6-29 V, which has been held up with mechanical trouble at 8,406 feet for the past few months. The company has succeeded in fishing out the 7-inch down to 6,392 feet and has recovered the 3½-inch down to 6,417 feet. The crew is fishing for the remainder of the pipe still in the hole and has hopes of effecting complete recovery in the near future.

Fruitvale

There were several wells officially listed for completion in the Fruitvale Field of Kern County during the past week, some of which, however, had been on tentative production tests for about 10 days previously. The Cascade Oil Co. listed the best completion by finishing No. 1 Hasson, flowing 360 bbls. of clean 21.5 gravity oil per day through a one-half-inch bean under a pressure of 520 pounds on the casing. This new well, bottomed at 3,788 feet and finished with a 4¾-inch liner carrying 270 feet of perforated, is the best well to be finished in the Fruitvale Field for several weeks. A second well will be drilled on this lease in the immediate future. The Jorgensen Oil Co. has recompleted its No. 1 pumping 280 bbls. of relatively clean 21.2 gravity oil per day from 3,786 feet. The Emerich Oil Co.'s No. 1 Greely, which has been on a preliminary production test for several days, is listed for completion as a 65-bbl. pumper from 3,690 feet. The Mohawk Petroleum Co.'s No. 12, bottomed at 3,850 feet, was good for only 25 bbls. per day on the beam, the oil showing a rather high cut with a consequent lowered gravity. The Petrol Production Co. has pulled the liner in No. 1 Bloemer, following the failure of this well to result in commercial production, and will probably resume work at 4,040 feet and add a little more hole. Nick Gerard and associates have just passed the 3,000-foot level in their No. 1, located in Section 23-29-27, and unless something unforeseen develops, should be in a position to make a bid for production during the next two or three weeks. H. L. Whiston is making a pumping test on his No. 1, but the best it would do was approximately 100 bbls. per day from 3,695 feet.

Midway-Sunset

The Standard Oil Co. is still drilling in No. 1 Mascot, a deep well being drilled in the Midway-Sunset Field of Kern County, and it is the present intention to make this well a conclusive deep test if possible. The bit was rotating a few days ago at 9,970 feet, the formation being a hard sandy shale. The Brookshire Oil Co., which is drilling a well in Section 24-31-22, cored a gray sand in this project at 3,602 feet. Hoke Woodward successfully completed No. 1 Vedder in the Mount Poso Field of Kern County early in the week and this new well, located in Section 28-26-28, is pumping 243 bbls. of 15.2 gravity oil cutting 2 per cent. There are two other wells under way in the Mount Poso Field at the present time, one of which, the Agey Petroleum Co.'s No. 2, has reached a depth of 2,225 feet. The Golden Bear Oil Co. has spudded in a new well on the Round Mountain Field of Kern County and the Coffee Oil Co. is rigging up rotary equipment in No. 3 in the same area for early work.

Lost Hills-Belridge

The Belridge Oil Co. is making a combination water and production test on its No. 51-27 in the North Belridge Field of Kern County, but the result of this open hole test is not yet known. In addition to this work, the company is rigging up rotary equipment in No. 20-35, a new project to be drilled in Section 35-27-20. The Casa Mira has rigged up rotary tools in No. 2 Theta, a new well to be drilled in Section 29-28-20, and the bit should begin making hole within a few days. The Continental is making fairly good footage in No. 3 Result, a projected Temblor completion in the North Belridge Field at 4,875 feet, but still has some little distance to go before picking up the pay. No work has yet been started on the projected deep test to be drilled in the Lost Hills Field of Kern County, although tentative plans have about been completed. The joint test to have been drilled in this area by the Richfield, Associated and others, will be located on the Williams lease held by the Associated Oil Co.

The General Petroleum has resumed work in No. 2 Morris in the Buttonwillow gas field of Kern County, following a short but spectacular blowout a few weeks ago, and the company expects to have this well finished early in November. The Milham Exploration Co. has staked a location for a new well to be drilled for the Southern Pacific Land Co. in the Buttonwillow Field, and rig construction is expected to get under way within a week or so. The Buttonwillow gas field is expected to go on commercial gas production some time during November, provided climatic conditions in southern California become a little more favorable to such work. The weather in the southern part of the State warmed up during the latter part of October with the result that the demand for natural gas may be a little later than usual. The Buttonwillow gas field gets a break this year because of the inability of operators in the Kettleman North Dome Field to make any substantial increase in gas production without violating the temporary injunction covering that field. The gas conservation law has not been of great consequence so far as its effectiveness is concerned with respect to the North Dome, as Superior Judge Strother has not rendered any definite decision which might be carried to the higher courts for decision. Judge Strother has succeeded, however, in securing the mutual co-operation of operators in the North Dome with the result that no ironclad injunction has been necessary. The gas conservation litigation was recently continued until February 28, 1933, and can consequently be revived if such action is ultimately found necessary.

San Miguelito

The Honolulu Consolidated finally got under way in the San Miguelito Field of Ventura County and is rotating in No. 1 Valenzuela at 980 feet. Considerable delay has been occasioned during the past two months by earth slides, which, two or three times, made it necessary for the company to postpone rig construction. Work on this lease was originally started by Warren Miller, who, after grading for his first location, was induced to move the location, only to run into considerable difficulty by earth slides. The Honolulu subsequently acquired the lease

TANKER SHIPMENTS FROM LOS ANGELES TO DOMESTIC AND FOREIGN PORTS

	Oct. 15, 1932		Oct. 8, 1932			
Intercoastal-domestic—	Total this week	Daily average	Total last week	Daily average	This year to date	Same time last year
Crude oil	116,812	16,687	.....	.....	116,812	.....
Diesel and gas oil	....	.....	155,177	22,165	763,622	1,379,888
Gasoline	....	.....	116,440	16,634	6,558,675	11,259,664
Kerosene	....	.....	.....	.....	154,372	187,934
Foreign exports—						
Crude oil	164,766	23,538	161,028	23,004	6,645,924	5,874,825
Fuel oil	131,132	18,733	13,182	1,883	6,666,681	10,913,414
Diesel and gas oil	23,545	3,364	55,207	7,887	1,932,782	2,864,844
Gasoline	211,231	30,176	140,394	20,056	6,726,477	7,101,697
Kerosene	50,291	7,184	94,810	13,544	2,371,949	1,396,048
Lubricants	....	.....	.....	.....	.....	36,353
Naphtha distillates	....	.....	.....	.....	120,075	.....
Coastwise-domestic—						
Crude oil	193,503	27,643	176,608	25,230	11,508,757	17,652,805
Fuel oil	126,509	18,073	214,378	30,625	9,360,228	10,530,478
Diesel and gas oil	16,105	2,301	.....	.....	995,389	1,234,965
Gasoline	177,596	25,371	216,129	30,876	11,958,091	11,391,852
Kerosene	1,328	190	.....	.....	133,421	254,242
Naphtha distillates	....	.....	.....	.....	.....	4,952

TANKER SHIPMENTS FROM SAN FRANCISCO TO DOMESTIC AND FOREIGN PORTS

Intercoastal-domestic—						
Diesel and gas oil	....	.....	73,405	10,486	556,606	.....
Gasoline	....	.....	.....	.....	844,423	833,929
Kerosene	....	.....	76,851	10,979	152,611	.....
Lubricants	....	.....	.....	.....	23,829	35,236
Foreign exports—						
Crude oil	70,661	10,094	.....	.....	778,312	269,592
Fuel oil	32,960	4,709	.....	.....	831,658	1,285,726
Diesel and gas oil	....	.....	.....	.....	519,332	482,708
Gasoline	169,730	24,247	113,528	16,218	3,162,572	3,687,130
Kerosene	114,628	16,375	.....	.....	882,858	783,732
Lubricants	....	.....	.....	.....	30,094	25,693
Coastwise-domestic—						
Fuel oil	....	.....	139,012	19,859	2,427,893	2,870,978
Diesel and gas oil	1,581	226	.....	.....	323,014	346,660
Gasoline	121,039	17,291	.....	.....	3,041,771	3,644,567
Kerosene	....	.....	.....	.....	91,723	259,094
Naphtha distillates	....	.....	.....	.....	.....	49,730

covering the Valenzuela property with Mr. Miller retaining an overriding royalty. The Chanslor-Canfield Midway Oil Co. is expected to start a second well in the San Miguelito Field during the next three weeks. The company's new well, No. 3-A Hobson, will be a direct offset to the Honolulu's No. 1 Valenzuela. No. 3-A Hobson will be located one location east of the Honolulu's first test on the 40-acre Valenzuela lease. In the Rincon Field of Ventura County, the Woodrow Petroleum Co. has been experiencing some delay due to the loss of circulation in its No. 1, but has regained control and is resuming work. The General Petroleum has recompleted No. 2 on the Needham state tideland permit No. 55 after plugging back from 7,339 feet to 3,012 feet. Upon being returned to production, this well came in flowing 206 bbls. of 29.3 gravity oil cutting 3 per cent. The Indian Petroleum Co. has not yet completed construction work on its isolated pier off the Rincon Field but should finish this preliminary work some time within the next few weeks.

Ventura Avenue

One new well is being started in the Ventura Avenue Field and, while there is no necessity of increasing development work, it is likely the Associated will start one or two wells during the next 30 or 60 days. Drilling operations have been consistently reduced for several months, due to curtailment work, with the result that there are only six strings of tools in operation. A recent check indicates that operators in the Ventura Avenue Field can meet curtailment for another two years without drilling another single well. This is due to the fact that curtailment of production is a reality in the Ventura Avenue Field and also because of the prolific tendencies of the productive horizons. The General Petroleum is making rather slow footage in No. 15-A Barnard, a projected deep test in the Ventura Avenue Field, but there is no necessity for hasty work. In the Carpinteria area of Santa Barbara County, the Casitas Oil Co. is logging some excellent gas showings in its No. 2 on state tideland permit No. 202 at 1,619 feet, with the result that directors of the company are rather optimistic. In the Coal Oil Point area, a few miles east of the prolific Elwood Field, the Bolsa Chica's wildcat on tideland permit No. 191 is flowing approximately 150 bbls. of salt water per day from 4,089 feet. Pressure gauges on the casing show 700 pounds, which ordinarily tends to indicate the existence of a substantial accumulation of either oil or gas. This well may result in the drilling of a second test in the Coal Oil Point area, as those in close touch with the situation are not satisfied with the outcome up to the present.

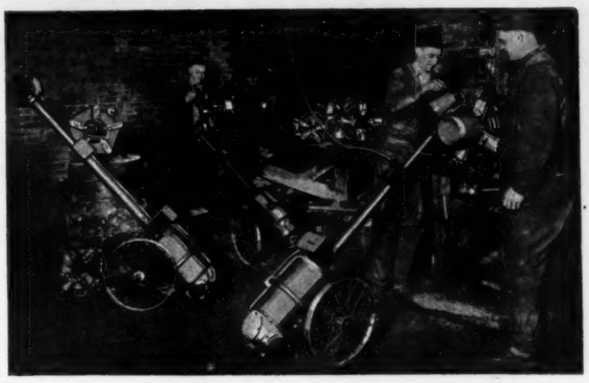
In the Santa Maria district of Santa Barbara County, the Union is busily engaged in a reconditioning program involving several wells. Production of Santa Maria has not shown any fluctuations for several years due to curtailment and the fact the company did not require any additional production. Work in this area the past two years indicates that the company has a much greater reserve than many anticipate. This is due to deeper production and consistent repressuring of upper horizons. The Elwood Field of Santa Barbara County is relatively quiet, although foundations are in for the Pacific Western Oil Co.'s No. 10 on state tideland permit No. 92 and No. 9 on state tideland permit No. 89 of the Barnsdall and Rio Grande.

Rosecrans

The Rosecrans Field of Los Angeles Basin may be revived during the next few months if operators proceed with contemplated work. This field appears to have gradually passed out of the picture, due more to lack of attention than lack

IMPORTANT NORTHERN CALIFORNIA WILDCATS

Company, well and location—	S.T.R.	Depth	Status:
Standard, No. 1 Santa Rosa Island, Santa Barbara Co...	unsurveyed	3,870	gr. sd. drilling
Field Gasoline Co., No. 1 Lompoc, Santa Barbara Co.....	6- 7-33	3,050	testing
Lee, W. M., No. 1 Lompoc, Santa Barbara Co.....	28- 8-34	....	material
Superior Oil Co., No. 5 Santa Maria, Santa Barbara Co...	36-10-33	489	abandoned
Superior Oil Co., No. 6 Santa Maria, Santa Barbara Co...	36-10-33	394	core hole
Equity Oil Co., No. 1 Coal Oil Point, Santa Barbara Co...	24- 4-29	3,750	suspended
Bolsa Chica, No. 1 Coal Oil Point, Santa Barbara Co.....	25- 4-29	4,031	testing
Deuel and associates, No. 1 Naples, Santa Barbara Co.	7- 4-29	5,134	suspended
Oakburn Oil Co., No. 1 Capitan, Santa Barbara Co.....	tideland	2,821	plugging
Casitas Oil Co., No. 1 Carpinteria, Santa Barbara Co.....	tideland	1,619	sd. sh. drilling
Cuyama Oil Co., No. 1 Cuyama, Santa Barbara Co.....	12-10-27	1,370	br. sh. drilling
Cebrien & Perkins, No. 1 Cuyama, Santa Barbara Co.....	27-10-26	....	material
Woodrow Pet., No. 1 Rincon, Ventura Co.....	4- 3-24	5,353	cleaning out
Indian Pet., No. 1 Rincon, Ventura Co.....	tideland	....	building pier
Sovereign Oil Co., No. 1 Fillmore, Ventura Co.....	23- 4-19	132	sd. drilling
Honolulu Consolidated, No. 1 Miguelito, Ventura Co.....	23- 3-24	488	sd. sh. drilling
Wilshire Oil Co., No. 1 Sulphur Mountain, Ventura Co...	20- 4-21	533	br. sh. drilling
Superior Oil Co., No. 1 Timber Canyon, Ventura Co.....	13- 4-21	5,402	sd. sh. drilling
Hardison & Temple, No. 1 Santa Paula, Ventura Co.....	22- 4-21	219	sd. drilling
International Oil Developers, No. 1 Conejo, Ventura Co...	33- 2-20	2,150	hd. sd. drilling
Las Posas Pet. Co., No. 1 Las Posas, Ventura Co.....	22- 2-20	mtl.	building rig
Strobeck, G. L., No. 1 Ojai, Ventura Co.....	34- 4-23	298	sh. drilling
General Pet., No. 2 Buttonwillow, Kern Co.....	6-28-23	2,342	cleaning out
Milham Expl., No. 19 Buttonwillow, Kern Co.....	8-28-23	2,415	cemented
Purman, T. H., No. 1 McKittrick, Kern Co.....	23-29-21	4,610	suspended
Welport Oil Co., No. 2 McKittrick, Kern Co.....	19-29-21	640	cleaning out
Ozena Oil Co., No. 2 McKittrick, Kern Co.....	27-29-31	3,031	plug 2,943 ft.
General Pet., No. 1 Belridge, Kern Co.....	30-28-21	3,260	suspended
Wallace, K. C., No. 1 Belridge, Kern Co.....	32-29-21	4,222	suspended
Cumberland Oil Co., No. 2 Devils Den, Kern Co.....	17-26-18	3,263	suspended
Hallaway, A. S., No. 1 Devils Den, Kern Co.....	11-25-18	913	hd. sd. drilling
Hannah, Tom, No. 1 Devils Den, Kern Co.....	25-25-18	3,516	suspended
Pyramid Hills Oil Co., No. 1 Devils Den, Kern Co.....	24-25-18	1,843	br. sh. drilling
Fowler, F., No. 1 Blackwell Corner, Kern Co.....	15-26-19	3,170	suspended
Kingsburg Expl. Co., No. 1 Kingsburg, Fresno Co.....	30-16-23	2,970	suspended
Kent & McDonald, No. 1 Carrizo Plains, San Luis Obispo..	3-32-22	3,130	sd. sh. drilling
Emerich Oil Co., No. 1 Carrizo Plains, San Luis Obispo..	22-32-22	1,841	suspended
Trav-El Oil Co., No. 1 Carrizo Plains, San Luis Obispo Co.	7-32-22	2,450	suspended
Indian Dome Oil Co., No. 1 Edna, San Luis Obispo Co...	26-31-12	3,352	suspended
Paso Robles Oil Co., No. 1 Edna, San Luis Obispo Co...	27-27-11	4,191	suspended
Schilling, C., No. 1 Atascadero, San Luis Obispo Co.....	1-29-12	1,650	suspended
Shell, No. 1 San Miguel, San Luis Obispo Co.....	4-25-12	2,948	sd. sh. drilling
Pacific Inland, well No. 1, Monterey Co.....	19-23-15	2,441	suspended
Brown, W. F., No. 1 Parkfield, Monterey Co.....	15-23-14	1,051	suspended
Thomas Pet. Co., No. 1 Parkfield, Monterey Co.....	31-22-14	198	suspended
Guess, E. B., No. 1 Corcoran, Kings Co.....	7-21-21	6,197	suspended
Woodward, Glen, No. 1 Dudley Ridge, Kings Co.....	32-22-20	775	suspended
Scott Bros. Drlg. Co., No. 1 Dudley Ridge, Kings Co.....	18-22-19	1,843	suspended
Kettleman Nat. Gas Co., No. 1 Dudley Ridge, Kings Co...	18-22-19	1,100	suspended
Irma Investment Co., No. 2 Dudley Ridge, Kings Co.....	7-23-20	1,224	suspended
Triune Oil Co., No. 1 Dudley Ridge, Kings Co.....	5-23-20	1,098	suspended
Dudley Dome Oil Co., No. 1 Dudley Ridge, Kings Co.....	9-23-20	1,197	suspended
Eagle Oil Co., No. 2 Dudley Ridge, Kings Co.....	15-23-20	1,342	suspended
Knudsen & Schmidt, No. 1 Reef Ridge, Kings Co.....	36-23-17	5,812	fishing
Kettleman Ridge Oil Co., No. 1 Avenal, Kings Co.....	10-23-16	1,148	suspended
Magee & Stone, No. 1 Alpaugh, Kings Co.....	34-24-22	5,060	suspended
Western Resource Corp., No. 3 Dudley Ridge, Kings Co...	12-23-22	1,840	suspended
Ducor Pet. Co., No. 1 Ducor, Tulare Co.....	14-24-27	2,200	suspended
Inland Valley Oil Co., No. 1 Visalia, Tulare Co.....	24-17-24	2,092	suspended
Sheldon & Gholson, No. 1 Porterville, Tulare Co.....	34-22-27	962	suspended
Hayman Oil Co., No. 1 Porterville, Tulare Co.....	17-23-28	380	suspended
Ellis & Sanford, No. 1 Tulare Lake, Tulare Co.....	20-24-23	1,490	suspended
Napa Oil Co., No. 1 Griffith, Napa Co.....	7- 8- 3	3,240	sd. sh. drilling
Oakdale Oil Co., No. 1 Oakdale, Stanislaus Co.....	5- 2-10	4,810	sd. sh. drilling
Hilderbrandt, R., No. 1 Crows Landing, Stanislaus Co....	36- 6- 7	1,130	suspended
Rushing Oil Co., No. 1 Waterford, Stanislaus Co.....	20- 3-13	2,644	sd. sh. drilling
Pacific Northern Oil Co., No. 1 Guinda, Yolo Co.....	23-12- 3	3,045	suspended
Bergman, Harry, No. 1 Dos Palos, Merced Co.....	12-12-11	316	sh. drilling
Los Banos Pet., No. 1 Los Banos, Merced Co.....	26-10- 9	rig	suspended



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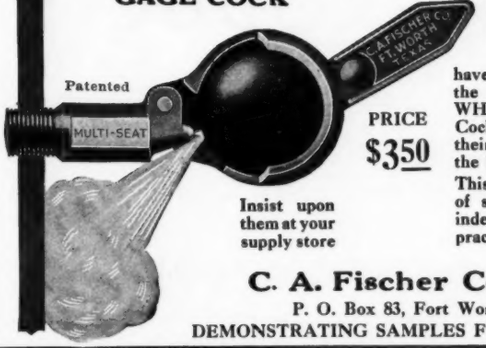

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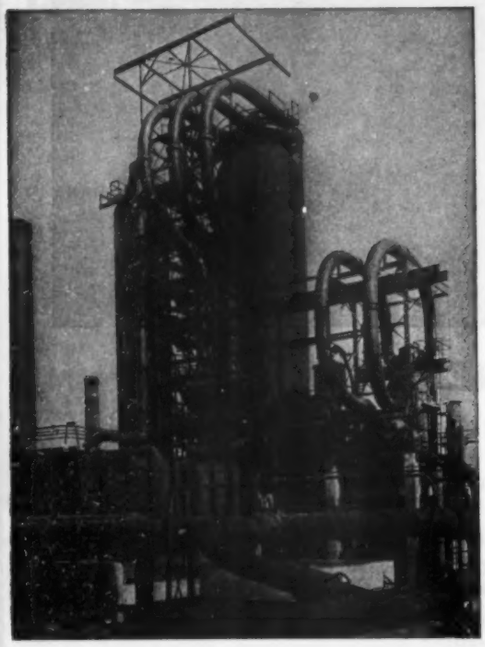

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of production possibilities. There now seems to be a tendency on the part of some operators to go back into the Rosecrans Field and stimulate production. The most important well under way is No. 2 Trust of the Barnsdall Oil Co., and while this project was wet on the recent production test, this does not mitigate against the development of increased production by deeper drilling. As a matter of fact, this well seems to have definitely proved the existence of a deeper productive horizon in the Rosecrans section. No. 2 Trust is rather far out on the structure and the inability to develop clean production is not of any special consequence. Correlation work indicates the probability that substantial production may be anticipated nearer the apex. It is reported work is scheduled to be started on a well nearer the top of the structure to determine the possibility of deep zone production. This will not involve the starting of a new well as tentative plans call for the deepening of an upper zone producer. This projected work will bear watching because it is practically a certainty the new zone found in the Barnsdall's No. 2 Trust will be commercially productive nearer the apex of the structure.

Seal Beach

The Continental Oil Co. picked up some gray sand in No. 35 Bixby in the Seal Beach Field of Los Angeles Basin at 6,604 feet, and the hole is being plugged back as a precautionary measure. The Continental completed No. 34 Bixby a week or so ago, but in compliance with curtailment work has pinched production back to approximately 1,000 bbls. per day. On the production test this well showed a maximum production of 2,681 bbls., the oil being exceptionally clean and testing 27.7 degrees. The best flow was made through three beans, ranging in size from fifty-nine-sixty-fourths inch to sixty-four-sixty-fourths inch. In the Long Beach Field, the George F. Getty Co., Inc., recompleted No. 26 Signal, located at Twenty-ninth Street and Atlantic Boulevard, after plugging back and perforating the 7-inch casing between 4,850 feet and 4,550 feet. This rejuvenation work resulted satisfactorily as the well was returned to production flowing 594 bbls. of relatively clean 27.3 gravity oil per day. The Frogpond district of the Long Beach Field continues to be the center of interest due to the successful completion of several upper zone wells. Most of the work in the Long Beach Field consists of reconditioning jobs or plugging operations.

The Forward Oil Co. experienced a rather unusual thing in No. 2 Davenport, a drilling project in the Richfield district of Los Angeles Basin, when this well blew out while the crew was bailing for a water shut off test at 3,764 feet. The well was brought under control without any great difficulty but created some little interest as this field has been in the pumping stage for several years. In the Inglewood Field, the Baldwin Oil Co. swabbed No. 9 Brownmor on an open hole production test between 5,543 feet and 5,690 feet, but could not lower the fluid level below the 1,150-foot level. After several days of work, it was decided to recement the 6⅝-inch water string under pressure. W. A. Kyle is also endeavoring to overcome water trouble in this field as No. 1 Pacific National has been plugged and tested by stages between 3,090 feet and 4,318 feet.

The Republic Petroleum has plugged back No. 1 Childs in the Dominguez Field from 6,094 feet to 4,820 feet and is proceeding with the plan of testing out the upper zone before abandonment work is undertaken. The Union has staked location for a new well, but this project, No. 19 Hellman, is not expected to get under way for 10 days. The Wilshire Annex Oil Co. has officially abandoned No. 1 Neace in the Potrero Field of Los Angeles Basin as a duster at 7,177 feet and has signified its intention of quitclaiming the property. On the Potrero Country Club property, the company is redrilling No. 3 at 3,550 feet, but should reach the bottom of the hole, 3,835 feet, within a week or so. The Union is making normal footage in No. 2 Vidor, a recent spud in the Playa Del Rey Field of Los Angeles Basin, and is expected to be given a production test within three weeks. In the meantime, the Standard should finish a new well in the West Coyote Field, as No. 111 Murphy Coyote is coring in the oil sand at 5,773 feet. A new wildcat is getting under way in the Wilmington district of Los Angeles Basin and the bit should begin making hole within a week or so, as the boilers have been set and rotary drilling equipment is being moved in. This exploration work is being undertaken by the Pacific Oil Investment Co., which recently acquired a rig erected several months ago by Walter I. Barcus in Section 28-4-13. This test should be of more than passing interest as no dry holes have been drilled within a radius of 3 or 4 miles.

WINDSOR GAS AGREEMENT

CHATHAM, Ontario, Oct. 29.—The Windsor, Ontario, city council has definitely approved an agreement with the Windsor Gas Co., distributing subsidiary of the Union Gas Co. in the Canadian border cities, under which increased discounts on gas sales will be allowed for a two-year period. In addition to these discounts, which are estimated to save Windsor consumers an aggregate of $75,000 a year, a sum of $10,000 will be paid by the company toward the costs of the recent rate case. In return, the city agrees to make no attempt to secure modification of the present rates for a four-year period.

MINEOLA RATE SUSPENDED

AUSTIN, Tex., Oct. 31.—The United Gas Public Service Co. has filed an appeal with the Texas Railroad Commission from the action of Mineola authorities in reducing gas rates. The reduced rate was suspended pending hearing on the appeal.

IMPORTANT SOUTHERN CALIFORNIA WILDCATS

Company, well and location—	S.T.R.	Depth	Status:
Hines Pet., No. 1 Ocean Park, Los Angeles Co.	9- 2-15	7,414	suspended
Taylor Oil Co., No. 1 Culver, Los Angeles Co.	12- 2-15	6,238	suspended
Co-operative Dev. Co., No. 1 Del Rey, Los Angeles Co.	26- 2-15	5,579	sd. sh. drilling
Del Rey Hills Corp., No. 1 Del Rey, Los Angeles Co.	26- 2-15	rig	rigging up
Palm Ridge Oil Co., No. 1 Palms, Los Angeles Co.	2- 2-15	2,124	suspended
Lawndale Pioneers, Inc., No. 1 Peck, Los Angeles Co.	20- 3-14	6,378	suspended
Baldwin Oil Co., No. 9 Inglewood, Los Angeles Co.	7- 2-14	5,696	recemented
Baldwin Hills Synd., No. 1 Inglewood, Los Angeles Co.	17- 2-14	4,090	suspended
Kyle, W. A., No. 1 Inglewood, Los Angeles Co.	7- 2-14	4,316	wet
Pacific Inv. Co., No. 1 Wilmington, Los Angeles Co.	28- 4-13	mtl.	building rig
El Dorado Oil Co., No. 1 Puente, Los Angeles Co.	30- 2- 9	2,860	suspended
Jones, W. L., No. 1 Lynwood, Los Angeles Co.	31- 2-12	3,790	sd. sh. drilling
Blinn & Gray, No. 1 Montebello, Los Angeles Co.	6- 2-11	5,060	suspended
Hutcheson & Andrus, No. 1 El Monte, Los Angeles Co.	11- 1-11	916	cemented
Yellowstone Oil Co., No. 1 Alhambra, Los Angeles Co.	24- 1-13	3,919	suspended
Smith, J. H., No. 1 Hasley, Los Angeles Co.	32- 5-17	3,212	redrilling
Superba Pet., No. 1 Newhall, Los Angeles Co.	11- 3-16	214	suspended
Sanbar Pet. Co., No. 1 Newhall, Los Angeles Co.	35- 5-16	918	sd. sh. drilling
Ball, W. T., No. 1 Newhall, Los Angeles Co.	34- 3-16	3,399	suspended
Security Dev. Co., No. 1 Newhall, Los Angeles Co.	31- 5-14	416	sd. sh. drilling
Ajax Pet., No. 1 Newport, Orange Co.	21- 6-10	7,259	suspended
Nuoil Co., No. 1 Newport, Orange Co.	29- 6-10	1,970	suspended
Mineral Expl., No. 1 Capistrano, Orange Co.	8- 8- 7	3,790	suspended
Orangethorpe Pet., No. 1 Brea, Orange Co.	32- 3-10	4,560	suspended
Spindletop Oil Co., No. 1 Salton Sea, Riverside Co.	25- 7-10	3,590	suspended
Duncan, N. I., No. 1 Sagebrush, Riverside Co.	8- 4- 6	1,157	suspended
Colan Dev. Co., No. 1 Redlands, San Bernardino Co.	25- 1- 2	2,392	suspended
Great American Pet., No. 1 Chino, San Bernardino Co.	18- 2- 8	111	sd. drilling
Mason Oil Co., No. 1 Salton Sea, Imperial Co.	1-17-15	680	sd. sh. drilling
Woods, D. H., No. 1 Salton Sea, Imperial Co.	7-11-16	774	sd. sh. drilling
San Felipe Oil Co., No. 1 Borega, San Diego Co.	25-11- 8	494	sd. sh. drilling
South Bay Oil Co., No. 1 Border, San Diego Co.	31-18- 2	1,243	suspended

Central Michigan Produces 20,500 Bbls; Latest Completion Makes 1,300 Bbls.

By GEORGE A. WHITNEY

MOUNT PLEASANT, Mich., Oct. 31. The Central Michigan Field, with its three pools, produces a daily average of approximately 20,500 bbls. The largest output of crude from any part of the State comes from the New East Pool and amounts to about 18,000 bbls. a day, and about 2,500 barrels is produced from the Vernon and Leaton Fields, the latter being in Isabella County, and the East Pool, in Greendale Township, Isabella County.

There are at this time five pipe line companies operating in the field: Pure Oil Pipe Line Co., Producers Pipe Line Co., Peerless Pipe Line Co., Simrall Pipe Line Co. and the Wellman Oil Co.

The Pure Oil Co. supplies both its Toledo, Ohio, and Midland, Mich., refineries as well as shipping to the Sun Oil Co., Toledo, Ohio. Producers Pipe Line Co. furnishes Old Dutch Refining Co. in Muskegon and the White Star Oil Co. Simrall company furnishes the Roosevelt refinery at Mount Pleasant. Peerless Pipe Line supplies its own refinery in Big Rapids, and the Wellman Oil Co. supplies its Grand Rapids refinery.

New Completions

The best of the late completions in the East Pool, in Greendale Township, Midland County, was Pure Oil Co.'s No. 1-A well, in the northeast corner of the Claud and Gladys Harnick farm, NE NE NE Section 14, which is credited with an initial of 1,300 bbls. Same company's No. 6 well, 1,650 feet from the north line and 330 feet from the east line of the George Purtell farm, NW Section 15, produced an initial of 50 bbls. Same company's No. 5 well, 2,310 feet from the north and west lines of the Emma O. Reed farm, SE SE NW Section 12, same township, is rated at 100 bbls. initial. Same company's No. 2 well, 990 feet from the north line and 330 feet from the east line of the Nathan Kidder farm, N half NE Section 17, same township, is reported with an initial of 75 bbls. from the Dundee formation.

In Isabella County the Mellon-Pollock Oil Co.'s No. 1 on the Lynch farm, Section 26, Vernon Township, and south of the Thayer farm well drilled by John C. Arthurs, Inc., which reported an initial of 100 bbls., was recently drilled in the Dundee for an estimated initial production of 75 bbls. The Thayer farm well is about a mile east of the Vernon Pool, and the belief of oil men is that the oil extends to the east in that area. Hundreds of acres have been under lease in that district of Vernon Township, but development for oil so far has been principally centered in Section 22. Several offset wells will be drilled as a result of the Thayer farm well. Much of the offset acreage is split up and will cause between 6 and 10 offset wells to be drilled.

The test made by J. L. Hickey on the G. W. Patrick farm, in the E half W half NE Section 24, Midland Township, Midland County, shows that an oil showing was found in the Berea at 2,330 feet, and the Traverse was passed through at 2,830 feet and the well was then drilled to a total depth of 3,800 feet and given up as dry.

The Michigan Gas & Oil Co.'s test on the B. Rayner farm, SW SW SW Section 6, Lee Township, Midland County, is being delayed by the pipe being pulled apart at a depth of 3,300 feet.

New Drilling Permits

Permits have been issued to H. C. Nelson, of Muskegon, to drill No. 1 well, 1,020 feet from the north line and 1,100 feet from the east line of the George Waller farm, in the NE SW Section 14, White River Township, Muskegon County; to the Michigan Pacific Oil & Gas Co. for No. 2 well, 990 feet from the north and 330 feet from the east line of the Joseph H. Otway farm, in the NE SW Section 22, Porter Township, Midland County; to the Pure Oil Co. for No. 3-A well, 330 feet from the north and west lines of the Laura E. Root farm, N half SE, Section 18, Greendale Township, Midland County; to W. A. Robinson for No. 3 well, 990 feet from the south line and 330 feet from the east line of the N. J. Skinner farm, NE SE SW Section 9, Greendale Township, Midland County; to the Pure Oil Co. for No. 3 well, 990 feet from the south line and 330 feet from the west line of the A. Seeley farm, SW SE Section 9, Greendale Township, Midland County; and to Isaac Shuler, trustee, for No. 2 well, 333 feet from the north line and 1,653 feet from the east line of the E. Rhemenschneider farm, in the NE NW NE Section 14, Greendale Township, Midland County.

Field Pickups

James G. Tiplady, trustee, of Detroit, has started to drill on the Henry L. and Susan S. Laycock farm, SE SE NW Section 11, Arcadia Township, Gratiot County, in the southeast corner of the lease. This test is certain to attract considerable attention as it has been the opinion of many that the district southwest of Alma has commercial oil possibilities. During the past month or more leasing has been active in Gratiot County. The Shell Oil Co. is reported to have taken up several hundred acres of leases. While Gratiot County has no commercial oil wells, previous tests drilled showed structure. In Elba Township, near Ashley, several small gas wells have been found.

Drilling continues active in the Central Michigan Field despite the fact that many of the wells during the past few weeks have been smaller. A heavy demand for Michigan crude probably is partly responsible for the steady pace in drilling. Several of the wells being drilled are forced offset locations.

The Muskegon Oil Corp. secured a permit to drill a test, 330 feet from the north line and 990 feet from the east line of the L. Price farm, NE SW Section 12, Dalton Township, Muskegon County.

A. H. Doughty, former Lansing mayor, and G. E. Hanners of St. Louis, according to report, have leased a block of approximately 15,000 acres, about 7 miles northwest of Lansing, and expect to start a test in Watertown Township, Clinton County.

The Pacific Oil & Gas Co. is shut down at 3,400 feet in the northeast corner of the Charles S. Hoyt farm, NW NW NE Section 24, Jasper Township, Midland County.

Theodore Oil Co.'s test in the southeast corner of the McBain farm, in the SE SE SW Section 1, Greendale Township, Midland County, is drilling around 2,400 feet and due for completion within a couple of weeks.

Pure Oil Co. has a fishing job in the Marshall formation in a test 2,310 feet from the south line and 330 feet from the east line of the Mattie Yost and others' farm, Section 35, Greendale Township, Midland County.

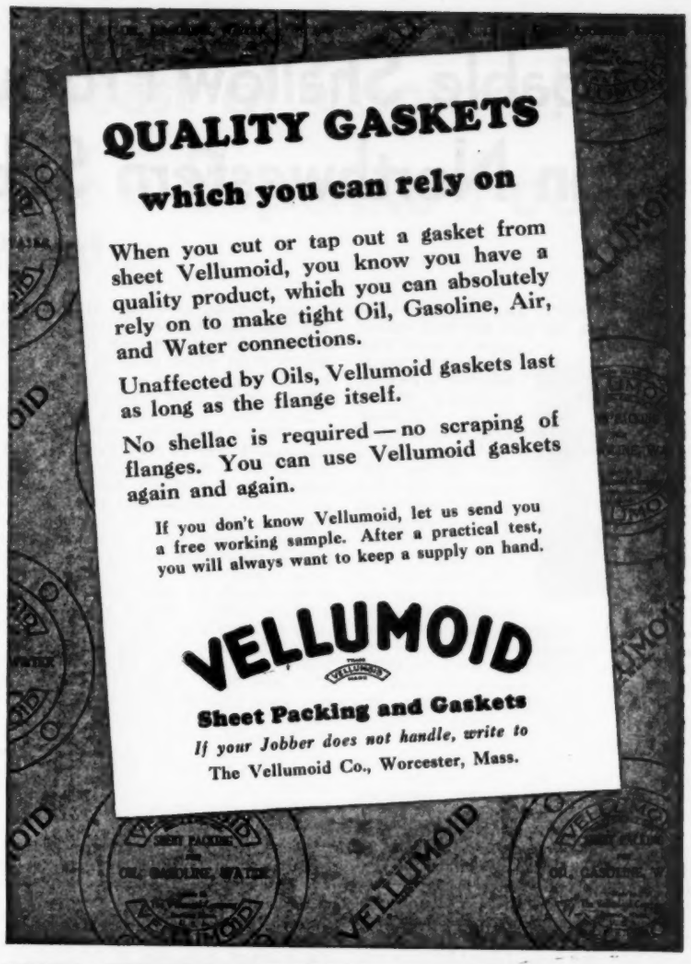
Gordon Oil Co.'s No. 5-B, in the northeast corner of the N. J. Skinner farm, NW NW NE Section 16, produced 120 bbls. initial in 12 hours. This is in Greendale Township, Midland County.

B. F. FISHER DEAD

Benjamin F. Fisher, a vice president of the Standard Pipe Line Co. and prominent in Louisiana oil development, died October 13 at Shreveport following a stroke suffered October 11.

D. W. HORNBACK DIES

D. W. Hornback, age 65, pioneer oil well driller of Humble, Tex., died at his home in Cleveland, Tex., recently. He was born April 4, 1867, in Eureka, Ind., and lived in Humble for 14 years.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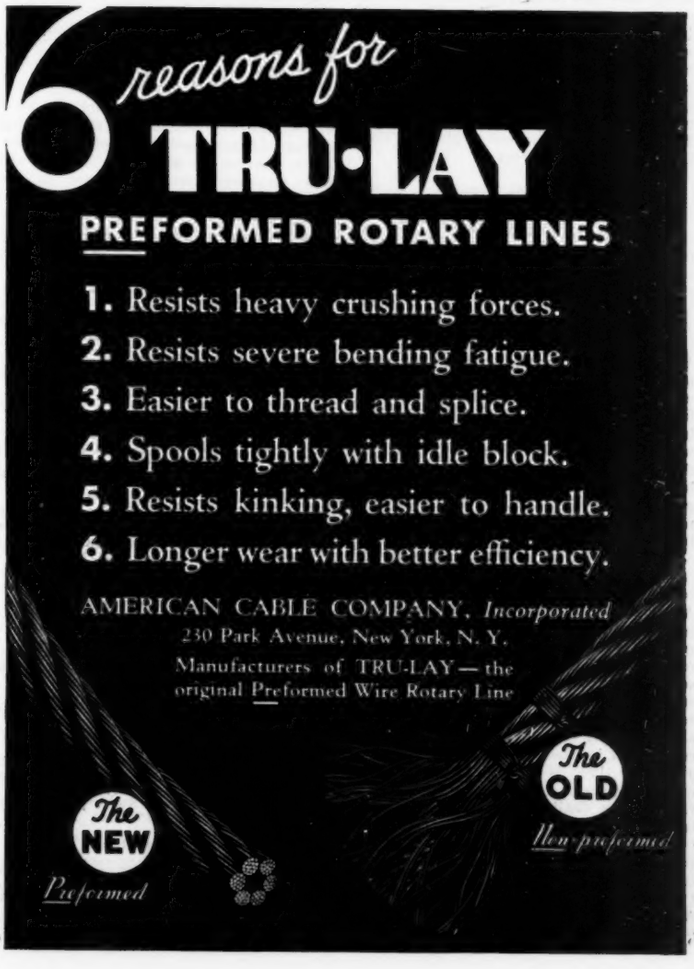
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Probable Shallow Producing Field Is Discovered in Northwestern Sabine Parish, Louisiana

By J. R. CRUMPTON
Staff Correspondent, Louisiana-Arkansas

SHREVEPORT, La., Oct. 31.—The second test in the new hot spot wildcat area around Converse in the northwestern part of Sabine Parish, North Louisiana, further strengthens the belief that a new shallow producing field has been uncovered. The explorations in this vicinity were first begun with the Woodbine or lower Cretaceous formations as the objective, but recent tests have developed production of high gravity oil below the Midway around the 1,600-foot level, which indicates a field of considerable area.

The well to instill new interest in this district is Gibson & Johnson's No. 2 Frost Lumber Co. in Section 15-9-13. The same operators' No. 1 Frost Lumber Co., Section 19-9-13, 3½ miles southwest of the second test, was officially completed during the past week pumping 40 bbls. of 45.6 gravity oil from 1,626 feet. The second well, located on a separate block 3½ miles northeast, has all the indications of making a better producer than the discovery well. The log of this second test reveals that sand was cored from 1,490-97 feet, gummy lime from 1,497-1,510 feet, and from 1,510-14 feet a cap of hard gray sandstone. From this depth to 1,516 feet, the total depth, a soft sand was encountered with no recovery in the core barrel, but a good show of oil developed, rising in the hole about 6 feet per hour through the drilling fluid. The operators have set 6⅝-inch casing at 1,484 feet and the well will be tested during the coming week.

Encouraging Report

The most encouraging report from this area is that the two wells, 3½ miles apart, check only 1 foot difference in the subsea level of the encountered pay stratum. The contact at the base of the Midway was made in the first well at 1,547 feet and on the No. 2 test at 1,491 feet, with the surface elevations 253 and 198 feet respectively. This reveals a consistency of the pay zones in this area covering more than 3 miles. It has not been definitely agreed upon by geologists interested in the new area as to just what particular formation is producing the oil, but the base of the Midway, the last 30 or 40 feet of which is hard, black, gummy shale, classed as black shale, seems to be a distinct marker over the pay zone in the wells drilled to date. In the next 525 feet after leaving the Midway, is found, in order, the Arkadelphia, Nacatoch, Marlbrook, Saratoga chalk and Annona chalk. The discovery well logs the pay as coming from 22 feet of sandy marl below the Saratoga chalk, the latter logged from 1,560-1,604 feet. The second test reports that it has not yet encountered the Saratoga chalk, in which case the oil is coming from the Nacatoch above. In any case, it has been definitely established by these two tests in the new area that there is a sand or sandy marl condition carrying a high-grade oil above the Annona chalk, which is not present in the Zwolle chalk rock field 10 miles to the southeast. It is practically proven that the Converse structure may produce from any of the several formations between the base of the Midway and the Annona chalk, including the latter, depending upon the porosity of the particular stratum under the drilling well. The conditions existing in the new area are far more encouraging than in the Zwolle Field which produces from crevices or breaks in the chalk with practically no sandy marl producing zone.

In addition to the shallow pay in this area, there is a potential producing Woodbine sand below the 3,100-foot level. J. J. Keen's No. 1 Belton, Section 31-9-13, 2 miles south of Gibson & Johnson's No. 1 test, and the original well drilled in this area, was junked and abandoned during last year after casing collapsed while bailing from 3,126 feet. This well had several good shows from the top of the chalk through the base, and encountered a likely looking sand in the Woodbine from 3,114-25 feet. The log of the well shows Austin chalk from 3,104-14 feet and a very soft sand with no recovery with core barrel from 3,114-25 feet. A core from 3,125-26 feet revealed what is known in North Louisiana as the Washita lime and in East Texas as the Georgetown lime. As the casing collapsed after bailing down 1,750 feet, the sand from 3,114-25 feet was never tested, but it holds out as a potential deeper pay in the Converse area.

The structure and location of the discovery well in the area was worked out and made by H. D. Easton, consulting geologist of Shreveport, who was also the discovering geologist of the Zwolle Field. The second test, with indications of being a better well, due to the first test having a bad casing job, was located by D. W. Jolley, independent geologist of Shreveport and formerly with the Federal Petroleum Co.

NORTH LOUISIANA

The North Louisiana district furnished all of the completions in this division during the past week. Out of 10 completions, four were oil wells, one in the new Converse area, and three in the Zwolle Field. The latter field also reported six dry holes. Following are the Zwolle producers: J. E. Grandstaff's No. 1 Johnson, Section 2-7-11, blowing with air 25 bbls. daily from 2,592 feet; Magnolia Petroleum Co.'s No. 2 Williams, Section 6-7-10, pumping 72 bbls. daily from 2,653 feet, and Lowery & Green's (formerly George Woolf), No. 1 Nulton, Section 3-7-13, pumping 30 bbls. daily from 2,430 feet. The dry holes in this area follow: Bridwell Oil & Gas Co.'s No. 1 Stille, Section 16-7-11, dry at 2,657 feet; J. I. Hall's No. 4 Jacobs, Section 1-7-11, dry and abandoned at 2,710 feet; Lyons & Neely's No. 3 Clanan, Section 14-7-11, abandoned at 2,750 feet; Ben Merritt, trustee's No. 1 Chadick, Section 31-8-10, dry at 2,728 feet; Sneed & Sneed's No. 1 Pearce, Section 35-8-13, salt water at 2,405 feet. A. F. Tarver's No. 3 Cutrer, Section 12-7-11, which had been rigged up to pump, failed to make a commercial producer and was abandoned at 2,600 feet.

Acquiring of wildcat blocks in North and Central Louisiana continues to compose a good part of the activities in these districts. In Natchitoches Parish, the Texarka Oil & Gas Co. has assembled 6,000 acres in Township 5n, Range 6w, and in Township 4n Range 6w, in the southern part of the parish and in the northern part of Vernon Parish. The acreage was leased from the Crowell-Spence Lumber Co., and the contract calls for a 3,000-foot test to begin within 60 days Announcement was made of another large block of commercial leases taken over by the Humble Oil Co. in Rapides Parish. A 30,000-acre block was leased from the Hardwood Ridge Lumber Co. on a 10-year commercial base for 30 cents per acre payment and 30 cents per acre a year renewal. Another block of 6,000 acres has been contracted for in Rapides Parish by the Petroleum Industries, Inc., for a 3,500-foot test to begin within six months.

Avoyelles Parish

In Avoyelles Parish, Mrs. Ethel E. Renner of Oklahoma City has taken over a block of 2,500 acres centering around Section 28-3n-5e, with a contract to begin immediate drilling. This block is about 3 miles northwest of T. J. Woodley, trustee's No. 1 Thompson-Koltz, Section 11-2n-5e, in the same parish. The latter well is now drilling at 1,680 feet. No other wildcats in this division have developed anything of interest during the last seven-day period. In the northwestern part of Bossier Parish, Breazelle & Steckall have not yet drilled 6-inch plug in their No. 1 Nattin, Section 15-22-14, after encountering 2 feet of sand from 2,940-42 feet. The total depth of the hole is 3,018 feet, and a drill stem test from the sand above developed a good show of oil. These operators have rigged up on the old Plain Dealing Corp.'s No. 1 Nattin, same section, and about one-fourth of a mile south. The latter well was completed last year as a 10-bbl. pumper of 30 gravity oil from 2,890 feet. Since the new well has penetrated about 10 feet of red gumbo and another streak of sand underlying it, it is the intention to go through this gumbo on the old well with the expectation of picking up a better showing, since it checks about 57 feet higher than the present test. In the northern part of Caddo Parish, the Caddo-Prairie Development Co.'s No. 1 Nichols, Section 10-22-15, is drilling in shale at 1,517 feet. A Claiborne Parish wildcat, in close proximity to old production in the northwestern part of the field, the Webster Oil Co.'s No. 1 Smith, Section 8-21-7, is drilling at 850 feet.

MISSISSIPPI

South of the Jackson Field in Rankin County, the Home Oil Production Co.'s No. 1 South Jackson Oil Co., Section 23-5n-1e, has met with barren results in an effort to get the second producing oil well in that immediate vicinity. The test is close to Henslee and others' No. 1 Warner, which recently produced 500 bbls. of heavy gravity oil and a large quantity of salt water. The present well with the total depth at 2,491 feet developed 1,000 feet of salt water in the hole, and has cemented back to 2,487 feet in an effort to shut off the salt water. Eight miles south of the Jackson Field in Hinds County, Love & Lancaster's No. 1 Elton Plantation, Section 17-4n-1e, an interesting wildcat off of the gas structure, is drilling in sandy shale at 3,300 feet. In Lamar County, Stauffer & Kouri's No. 1 Bond, Section 18-2n-14w, has plugged the hole 20 feet from the bottom at 3,026 feet and will make a drill stem test at 3,006 feet. A previous test at the total depth resulted in 27 fourbles of salt water in 10 minutes with only a small show of gas.

Daily Average Runs

Due to a sharp decline in the Zwolle Field, the fields of North Louisiana and Arkansas netted a decrease of 565 bbls. in the daily average runs during the past week. The daily average runs from the several pools were:

NORTH LOUISIANA

	Bbls.
Caddo light	5,180
Caddo heavy	1,875
Cotton Valley	710
DeSoto and Red River	1,840
Elm Grove	395
Haynesville	4,120
Holly	210
Homer	2,720
Pleasant Hill	270
Sarepta-Carterville	820
Urania	3,535
Zwolle	7,610
Total	29,285
Total previous week	29,995
Decrease	710

ARKANSAS

Champagnolle	1,715
El Dorado	2,950
Lisbon	455
Nevada	910
Smackover light	2,860
Smackover heavy	23,635
Stephens	110
Urbana	1,380
Total	34,015
Total previous week	33,870
Increase	145
Total both states	63,300
Total previous week	63,865
Decrease	565

Wildcat Operations in Louisiana-Arkansas

(Rotary operations unless otherwise designated)

North Louisiana

AVOYELLES PARISH

Company, well, farm name, section and block— Remarks:

T. J. Woodley, tr.'s No. 1 Thompson & Koltz, 2,640 ft. E. 200 ft. S, NW cor., Sec. 11-2n-5e.....Drlg. 1,680 ft.

BEAUREGARD PARISH

DeRidder Development Co.'s No. 1 McMahan, 158 ft. S, 160 ft. W NE cor. NW, Sec. 33-3s-9w .....S.D. 1,385 ft.

BIENVILLE PARISH

Black Lake Dev. Co.'s No. 1 Petty Stave Co., NW NW, Sec. 19-18-6w .....Drlg. 1,985 ft.

R. S. Ross et al's No. 1 W. M. Beck, NE NE, Sec. 5-18-8..Derrick.

BOSSIER PARISH

Belmont Oil Co.'s No. 1 Edwards, 190 ft. N and E, SW cor. NE, Sec. 12-18-12 .....Coring 976 ft.

Breazelle & Steckoll's No. 1 Nattin, C SW NE, Sec. 15-22-14 .....Set 6-in. 2,967 ft; T.D. 3,018 ft.

A. W. Phillips, tr.'s No. 1 Oden, 300 ft. W, 150 ft. N, SE cor. NW NW, Sec. 4-18-13.....Rigging up.

CADDO PARISH

Bolinger & Walker's No. 1 Thompson, SE SW, Sec. 16-22-14 .....Derrick pattern.

Caddo-Prairie Dev. Co.'s No. 1 Nichols, 660 ft. N, 400 ft. E, SW cor. NE SW, Sec. 10-22-15.....Drlg. 1,517 ft.

CALDWELL PARISH

Carter Bell's No. 1 Taylor, 150 ft. S, 150 ft. E, NW cor. NE SE, Sec. 17-14-4 .....S.D. 3,712 ft.

CLAIBORNE PARISH

Lone Oil Co.'s No. 1 Kinder, Sec. 2-21-7 .....Rigging up.

Robertson & Aurand's No. 1 Smith, 200 ft. S and E, NW cor. SE NE, Sec. 8-21-7..... Drlg. 790 ft.

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Wildcat Four Miles Southeast of Conroe Field May Mean Opening of a Separate Pool

By NEIL WILLIAMS
Staff Correspondent, Gulf Coast Fields

HOUSTON, Tex., Oct. 31.—Completion of Plummer & McDaniel's No. 1 Keystone Mills, A. S. James (T.&N.O. No. 4) Survey, a wildcat 4 miles to the southeast of the Conroe Field, Montgomery County, as an oil producer has thrown some new complications into the district, geologically speaking. Although extending the productive area substantially, there is some question as to whether the well is an extension or whether it marks the opening of a separate new pool.

This well, which blew in early the past week, has now been successfully completed and is making between 325 bbls. and 350 bbls. daily through chokes and has a pressure of 1,980 pounds on the tubing. Gravity of the oil is 42 degrees at a temperature of 56°. Sand in the well is at a total depth of only 5,009 feet, where 17 feet of 5-inch screen was set.

The depth of this sand is considerably higher than in the Conroe Field itself but it has not been determined definitely whether this is the same sand. The nature of the well, however, is similar to that of wells in the Conroe Field which have been completed in the top of the producing horizon. It is generally recognized that the well has uncovered something of potential importance, whether a new pool or an extension to the Conroe Field.

Location of the well is in what is known as the Outlaw Dome district, which has been recognized for many years as a "high" or possible salt dome and on it and around the vicinity a number of shallow holes were drilled long before there was any thought of drilling around Conroe proper. It is likely that structurally this is separate from the Conroe Field, but, if not, the well opens a large amount of acreage to the southeast of Conroe for development, which if fully proved will make the Conroe Field 10 miles long from northwest to southeast, exclusive of possible further development and extension to the south of the new well. The theory now has been advanced by some that production may be proved in a line as far to the south as a point a few miles to the north of the Humble Field.

Sale Not Confirmed

It has been currently rumored that negotiations are under way and possibly about completed for the purchase of the Plummer & McDaniel holdings in the new area to one of the larger companies. This, however, has not been confirmed.

In the Conroe Field proper, developments were marked by a continuation of activity, resulting in further proving up of the productive area by the completion of four additional wells with a half dozen others on the sand. The northern limits of the field, however, received further definition with the abandonment of Humble Oil & Refining Co.'s No. 18 South Texas Development Co. which tested salt water at 5,186 feet. This well is at the extreme north end of development. Rowe & Flowers also have definitely abandoned their No. 1 Alexander, which is still further to the north and also west of the nearest production. The latter originally was drilled to a total depth of 5,223 feet and then plugged to 5,096 feet where it swabbed some oil with a large amount of salt water.

Polk County

In the new district recently opened in southern Polk County by Dick Schwabb's No. 1 Carlton & Davis, A. Viesca Survey, which was completed as a wet gas well in a sand at 4,239-4,311 feet, drilling has been started on a second test, No. 1 Davis & Holmes, approximately 1,050 feet west and a little south of the discovery well. The second well is on a lease held by Shell Petroleum Corp., which company has advanced $25,000 for drilling the test.

The second well will be drilled deeper in the pay in an effort to make an oil producer, this test being drilled rather than deepening the discovery well at this time. That an oil field will be proved by going deeper in the pay is considered more than probable as such conditions are characteristic of Eocene fields and particularly the Cockfield of the Yequa from which the Schwabb well is producing and in which Conroe is being developed.

Pending completion of the second test by Dick Schwabb, Shell Petroleum Corp. has an option to purchase the discovery well and the remaining acreage, comprising between 700 and 800 acres, held by Mr. Schwabb in the district. Exercise of the option calls for a $350,000 cash payment with an additional $650,000 to be paid out of oil. The discovery well and all acreage held by Mr. Schwabb is inside a spread of a little less than 2,000 acres taken by Shell to assist in the drilling of the first well.

An important trade was consummated in the new Polk County district the past week by the purchase by Harrison & Abercrombie of Houston of all the W. T. Carter & Co. acreage, comprising approximately 7,000 acres, located in that group of surveys adjoining to the south the A. Viesca Survey, in which the discovery well is located. The acreage is in a solid block. Terms of the trade called for a cash payment of $175,000 and an oil payment of $750,000 with an additional one-twenty-fourth royalty on the first 15,000,000 bbls. produced and a one-twelfth royalty thereafter. A well also must be started within 30 days.

Spurger Wildcat

Republic Production Co. and Houston Oil Co.'s No. 1 Sterne fee, wildcat wet gas well located in the Adolph Sterne Survey, near Spurger in eastern Tyler County, and which was completed early this month, has quit producing and operators now are moving a rig back on the location to work over the well. It has not been determined whether the screen has sanded up or whether the well has quit for some other cause. The well was brought in from sand at a total depth of 4,708 feet making an estimated 20,000,000 feet of gas with a pressure of 1,750 pounds on tubing and 950 pounds on casing. The rig already had been set up on a second test, No. 1 Kirby, located a half mile to the northeast of the discovery well, drilling of which now will await the working over of No. 1 Sterne fee.

Wharton County

Additional drilling and development activity was started up in Wharton County the past week. In the Hungerford district, Cullen & West now are drilling two deep tests, approximately 2 miles apart. The first is No. 1 Hawes in the G. W. Singleton Survey, which has just spudded in, and the other is No. 1 Hudgins, Alexander Jackson Survey, now rigging up. Both are on a geophysical block "farmed" out to these operators by Gulf Production Co. The tests are on opposite sides of the block. On what is known as the Leech prospect, recently worked geophysically by H. C. Cockburn, a trade has been made with the Steed Production Co. of Dallas for the drilling of a deep test, derrick for which now is being built. This test will be on the Lurker tract in the E.T. R.R. Survey, Section 58. The Leech area is considered promising. It is marked by a well defined surface high and numerous gas seepages exist. Several shallow tests were drilled in the vicinity years ago. The major part of the acreage is owned by H. C. Cockburn but protection is held by Shell Petroleum Corp., Gulf Production Co., Pure Oil Co., Alpha Oil Co., The Texas Company and several independents. The Texas Company owns 160 acres in fee right on top of the geophysical picture. The block nearly adjoins the Pure Oil Co.'s Louise geophysical prospect, which was worked and blocked several years ago. Pure Oil Co. also has just blocked approximately 8,000 acres in the extreme southern part of the county near the town of Magnet and centering around the A. Castleman and adjoining surveys.

Wharton County recently came in the spotlight because of gas showings encountered in two wildcats on separate geophysical prospects north of El Campo, these wildcats being Smith and others' No. 1 Mitchell, H.&T.C. Survey No. 8 on a Shell Petroleum Corp. block, and Gantt and others' No. 1 Laura Hahn, N. Mancho Survey, on a Wood R. Alexander Oil Co. block. These two tests now are drilling below 4,575 feet and 4,525 feet, respectively.

Other Completions

Outside of Conroe, there were few completions of particular importance the past week. However, at Rabbs Ridge, Humble Oil & Refining Co. and Gulf Production Co. brought in their No. 5 George flowing 55 bbls. hourly through a three-eighths inch choke from sand at 5,350 feet. Some interest is being centered on a deep test being drilled on the extreme south end of Rabbs Ridge, this test being No. 3 Davis, which at latest report was down 6,281 feet and trying to blow. This is the deepest test drilled so far, development having been in a horizon from 5,100-5,400 feet. In the last issue of The Oil and Gas Journal it was stated that Cullen & West were drilling a test on the Edwards and Riggins tract at the north end of the field. This test is being drilled by Gulf Production Co. Naylor and others are rigging up for their No. 1 Whitmore, which will be an interesting test. It is north of the field on a 20-acre tract, Lot 7, Samuel Kennedy Survey. The lease is in the east part of an 80-acre tract owned by Cullen & West and which was held out by the latter when they sold out their half interest in the Rabbs Ridge Field to Humble Oil & Refining Co.

At Port Neches, southwestern Orange County, The Texas Company has completed its No. 2 Polk-Kuhn-Glass, flowing 145 bbls. of pipe line oil daily, 540 pounds pressure, from sand at 3,483 feet.

Matagorda County

Cockburn Oil Corp. has made location for its fifth test on the Shepherds Mott prospect in Matagorda County. This will be No. 5 Hawkins, 2,200 feet southeast and 1,800 feet northeast of the west corner of the Daniel McCarthy Survey. So far no commercial production has been found in this area, although one well, No. 2 Hawkins, flowed some oil for a short time from a sand and shale at 5,216-44 feet. Deep drilling has been hampered by heaving shale difficulties.

Gulf Coast Fields and Wildcats

Week Ending October 29

RACCOON BEND—AUSTIN COUNTY

Company, farm and location—	Remarks:
Humble Oil & Ref. Co.'s No. 8 Woodley, Wm. Harvey Sur., 2,380 ft. southeasterly along SE line from SW cor. of tract and thence 412 ft. northeasterly at right angles	Drlg. sandy shale 1,188 ft.

DAMON MOUND—BRAZORIA COUNTY

Intercoastal Oil Co.'s No. 10 Wisdom, A. Darst Sur., 440 ft. from NW line and 170 ft. from SW line of tract	No report.
Sinclair Oil & Gas Co.'s No. 3 Norton (W.O.), P. D. McNeel Sur., 230 ft. from NE line and 303 ft. from SE line of 150-acre tract	Pulling screen to work over 3,651 ft.

WEST COLUMBIA—BRAZORIA COUNTY

The Texas Company's No. 7 Abrams (W.O.), George Tennille Sur.	Set 51⅝ ft. of 3-in. blank and 64⅝ ft. of 3-in. screen 3,437 ft; tested S.W.; abd.

BARBERS HILL—CHAMBERS COUNTY

Joe Bashara's No. 2 Tarbutton (D.D.), Henry Griffith League	Coring sand showing oil 4,239 ft.
R. E. Ferrell's No. 2 Wilburn, Henry Griffith League, 215 ft. W of No. 1 in center of 45-acre tract	T.D. 3,000 ft. in shale; fishing.
Humble Oil & Ref. Co.'s No. 1 Kirby, Henry Griffith League, 208 ft. from S line and 100 ft. from E line of lease	Drlg. anhydrite 1,358 ft.
Mills Bennett Prod. Co.'s No. 5 Means, Henry Griffith League, 200 ft. W of No. 4	Drlg. salt 2,798 ft.
Mills Bennett Prod. Co.'s No. 5 Kirby, Henry Griffith League, 400 ft. from W line and 41 ft. from S line of tract	Cap rock 1,211 ft; losing returns.
Moody Corp.'s No. 1 Collier (W.O.), Henry Griffith League, 47 ft. N line and 25 ft. from W line of tract	Drlg. sand and shale 5,117 ft.
The Texas Company's No. 3 Lawrence fee, Henry Griffith League, 740 ft. W of E line in C of tract	Clay 69 ft; cmtd. 10-in. csg.
The Texas Company's No. 2 Wilburn (W.O.), Henry Griffith League, 70 ft. from N line and 330 ft. from E line of tract	Cored sand 5,187-5,211 ft.
The Texas Company's No. 9 Wilburn, Henry Griffith League, 580 ft. E of NW cor. and 50 ft. S of N line	Derrick.
Texas Gulf Prod. Co.'s No. 4 Ilfrey, Henry Griffith League, 894 ft. from E line in C of tract	Drlg. salt 1,436 ft; top of salt 1,382 ft.
Texas Gulf Prod. Co.'s No. 11-A Kirby, Henry Griffith League, 1,090 ft. from W line and 226 ft. from S line of "A" lease	Drlg. salt 4,646 ft.

(Continued on Page 62)

Wildcat Operations in Southwest Texas

(Continued from Page 46)

BROOKS COUNTY

M. P. Evans' No. 1 Amanda Perez, 1,300 ft. from N line, 200 ft. from W line of Sec. 6, La Encantada grant ..... T.D. 1,480 ft.; correction on location; first reported as No. 1 Martinez.

CALDWELL COUNTY

Cargill et al's No. 1 Dameron, 150 ft. from N and W lines of 72.5-ac. tract in Dillard Cooper Sur. ..... T.D. 1,829 ft.; in chalk showing oil.

J. M. Dickson's No. 1 W. T. Mooney, 7,600 ft. from NE line, 5,200 ft. from SE line of Solomon Seal Sur. ..... Location.

E. D. Herne's No. 1 M. C. and P. W. Jeffrey 136-ac. tract, 150 ft. from N and E lines of tract in James George Sur. ..... Set surface pipe, waiting for wtr.

J. W. Kemp's No. 1 George Vickery, 760 ft. from SE line, 200 ft. from NE line of tract in Squire Damon Sur. ..... Set surface csg.

Noack & Lanning's No. 1 Barber, 150 ft. from S and E lines of 82-ac. tract in Squire Damon Sur. ..... T.D. 700 ft.; drlg.

COMAL COUNTY

Caldwell and M. Lanier's No. 1 T. J. Byler, 175 varas from W line, 370 varas from N line of 320-acre tract in H.E.&W.T. Sur., Sec. 894 ..... T.D. 931 ft.; drlg.

DIMMITT COUNTY

Motes-Campbell Co.'s No. 1 Denton, 150 ft. from E line, 250 ft. from S line of Tracts 53 and 54 in Sec. 60 of Denton Colony Subd. ..... T.D. 1,200 ft.; setting csg. to shut out water.

DUVAL COUNTY

J. E. Anderson's No. 1 Wood-Welder, 115 ft. from W line, 400 ft. from N line of Sur. No. 71 ..... T.D. 2,110 ft.; drlg.

Al Buchanan's No. 1 Foster, 990 ft. from E line, 1,520 ft. from S line of Sur. 268 ..... Spudded in.

Buchanan & Terrell's No. 1 Duval County Ranch Co., 990 ft. to W line, 1,120 ft. to S line of Sur., No. 96 ... T.D. 1,650 ft.; set csg.

Duggan & Smith's No. 2 Sutherland, 330 ft. from S and W lines of Sur. No. 511 ..... T.D. 1,894 ft.; standing.

Frank Gravis' No. 3 Schaliert in Sur. 255 (Palangano salt dome) ..... T.D. 1,653 ft.; standing.

J. A. Leindecker's No. 1 G. W. Sutherland, 560 ft. from S line, 450 ft. from W line of Sur. No. 183 ..... T.D. 1,803 ft.; cored sand.

Payne & Vernon's No. 1 A. Roach, 865 ft. from E line, 45 ft. from S line of Blk. 7, Sur. No. 457 ..... Rigged up.

Plymouth Oil Co.'s No. 1 Hoffman, cen. of Sur. 113 ..... T.D. 2,571 ft.; drlg.

C. F. Scott's No. 1 J. W. Kidd, 990 ft. from N and E lines of SE of Sur. No. 56 ..... Rigging up.

Smith & Capps' No. 1 Peters, 330 ft. from S line, 340 ft. from W line of NE of Sur. No. 178 ..... Rigging up.

Sun Oil Co.'s No. 1 Duval County Ranch Co., 1,650 ft. to N and W lines of Sur. No. 78, or 330 ft. to S and W lines of E half of NW of Sur. No. 76 ..... T.D. 2,154 ft.; set csg.

S.R.C. Oil Co.'s No. 1 Duval County Ranch Co., 150 ft. from N line, 4,200 ft. from W line of Sur. 192 ..... Location.

FRIO COUNTY

Amerada Pet. Corp.'s No. 1 Halff & Oppenheimer, 1,200 ft. from N line, 200 ft. from E line of W. F. Halsel Sur. ..... T.D. 4,785 ft.; plugging back to straighten hole.

GILLESPIE COUNTY

Rod Lagray's No. 1 Stephen, 500 ft. from N and W lines of A.B.&M. Sur. No. 969 ..... Spudded in.

GUADALUPE COUNTY

B. E. Brock's No. 1 Ogletree, 1,600 ft. from W line, 450 ft. from S line of tract in Robert Smith Sur. ..... T.D. 1,890 ft.; standing.

Keeno & Russell's No. 1 Lowman, 300 ft. from E line, 350 ft. from N line of tract in George Allen Sur. .... T.D. 380 ft.; standing.

W. A. Scrutchin's No. 1 S. J. Lowman, 170 ft. from N line, 195 ft. from W line of 10-ac. tract, in Blk. 1, Sec. No. 1 of S. J. Barnes Sur. -ac. ..... Location.

H. A. Suttle's No. 1 O. J. Halm, 150 ft. from N line, 1,900 ft. from E line of 331-ac. tract in J. Kent Sur. ..... T.D. 2,100 ft.; drlg.

J. T. Stover's No. 1 Paul Hoffman, 1 mile SW of Salmar Pool ..... T.D. 1,967 ft.; waiting for csg.

F. W. Tong's No. 1 Henry Rahe, 650 ft. to SW lines, 1,300 ft. to NW lines, Moses Baker Sur. ..... Spudded in.

GOLIAD COUNTY

Hoffman & Gooch's No. 1 Fromme, 600 ft. from N and 1,300 ft. from W line of Peter B. Dexter Sur. ..... T.D. 2,470 ft.; standing.

GONZALES COUNTY

Antibus et al's No. 1 James, 6,350 ft. from N line, 1,300 ft. from E line of Mary A. Williams Sur. ..... T.D. 1,247 ft.; coring.

Edmiston & Kirby Pet. Co.'s No. 1 J. W. Ward, Jr., 300 ft. from N line, 833 ft. from W line of tract in Dan McKay Sur. ..... T.D. 1,592 ft.; standing.

E. Haenel, Jr., No. 1-A J. James 113-ac., 900 varas from E line, 300 ft. from S line of tract in M. A. Williams Sur. ..... Dropped; duplicate of Antibus' No. 1 James.

Kirby Pet. Co. and Bennett's No. 1 Lum & Boulder, 1,100 ft. to SE lines, 100 ft. to SW lines, Russell Ward Sur. ..... T.D. 4,552 ft.; drlg.

Luling Oil & Gas Co.'s No. 2 Dubose, 5,000 ft. from NW line, 5,080 ft. from SW line of F. R. Whitney Sur. .... T.D. 1,750 ft.; drlg.

Dave Watson, trustee's No. 1 Cardwell, Byrd Lockhart Sur., 7 miles S Gonzales ..... Moving in tools.

HIDALGO COUNTY

Barrett-Kanellos' No. 1 J. B. Brock, 7 miles W and N from Mission (on Monte Cristo road) ..... T.D. 4,590 ft. S.D.

Palm City Pet. Co.'s No. 1 J. T. Lomax, 7,500 ft. from S and E lines of San Roman Sur. ..... T.D. 1,445 ft.; drlg.

Dayle L. Smith's No. 3 Daskam, SW part of county .... T.D. 1,726 ft.; S.D.

JIM HOGG COUNTY

Cole Pet. Co.'s No. 1 W. Allen, 990 ft. to E line, 1,320 ft. to N line of Blk. 13, Randado grant ..... Location.

D. C. DeWitt's No. 1 Gomes, 1,110 ft. from N line, 150 ft. from W line of Sur. No. 12, SW part of county .. T.D. 1,580 ft.; mchry. repair.

JIM WELLS COUNTY

Crawford et al's No. 1 Hoffman, 1,980 ft. N and 660 ft. W of most easterly SE cor. of Hoffman 7,000-ac. tract in La Trinidad grant ..... T.D. 4,313 ft.; abnd.

F. A. Lain's No. 1 Vernon Porter, 800 ft. from S line, 400 ft. from W line of 200-ac. tract in Sur. 25 ..... T.D. 2,580 ft.; drlg.

KARNES COUNTY

A. E. Edmiston's No. 1 G. W. Cross, 500 ft. from E line, 150 ft. from N line of tract in M. N. Reed Sur. .... Moving in rig.

H. J. Porter et al's No. 1 Ingram, 275-ac., 1,500 ft. from E line, 300 ft. from S line of tract in Carolos Martines Sur. ..... Rigging up.

Tippett & Mull's No. 1 Smith, 8,500 ft. from N line, 200 ft. from E line of Francis Haskins Sur., 3½ miles E of Helena ..... Rigging up.

KERR COUNTY

Evans & Gant's No. 1 Estelle Young, 150 ft. out of NW cor. of Sec. 28, E. A. Burge Sur. ..... T.D. 1,310 ft.; standing.

Evans et al's No. 1 Jeff Love, 150 ft. to S and E lines of C.C.S.D.&R.G.N.G. Sur. No. 1,595 ..... Rigging up.

Van Duyn & Moore's No. 1 Nowlin, 2,000 ft. from E line, 2,200 ft. from N line of James R. Bettner Sur. .. Spudded in.

Verde Oil & Gas Co.'s No. 1 J. D. Witt, 1,320 ft. from N line, 1,320 ft. from W line of Sec. 1,923 in Hamilton Sur. ..... T.D. 118 ft.; standing.

KLEBERG COUNTY

H. Carter's No. 1 R. H. Simmons, 150 ft. from S and W lines of tract in Sec. 7, King Sur. No. 2 ..... T.D. 2,205 ft.; resuming drlg.

Harris et al's No. 1 Dennett, north of Kingsville Field .. Spudded in and set surface csg.

LA SALLE COUNTY

Interstate Oil Industries, Inc.'s No. 1 J. F. Mayes, 600 ft. from S and W lines of Blk. 20, L&G.N. Sur. No. 19 ..... Location.

LIVE OAK COUNTY

Brown & Whitting's No. 1 A. Laseter, 900 ft. from S line, 1,200 ft. from W line of tract in S. Hays Sur. ... T.D. 1,084 ft.; abnd.

J. H. Durbin's No. 1 Marbach, 1,900 ft. from W line, 425 ft. from SE line of tract in S. Hayes Sur. ..... T.D. 908 ft.; abnd.; skidding rig.

J. A. Harper's No. 1 fee, 2,130 ft. to N line, 510 ft. to E line of farm, J. Pointevant Sur. 37 ..... T.D. 1,100 ft.; waiting for csg.

C. J. Webster Oil & Gas Co.'s No. 1 O. F. Akers, 300-ac. tract in T. Henry Sur. ..... Location.

LEE COUNTY

Paton Bros.' No. 2 Turner, 150 ft. due SE of No. 1-A Turner, junked at 5,675 ft. in the David Hudson Sur., 2 miles SE from Tangiewood ..... Location.

McMULLEN COUNTY

Jaqua & Crow's No. 1 Hagist, 330 ft. from N and W lines of R. W. Mills Sur. No. 467 ..... Spudded in.

C. C. Shumway's No. 1 Shiner, 400 ft. from W line, 200 ft. from N line of Blk. 45 of Shumway Subd. of Shiner ranch ..... Moving in rig.

Skinner & Bailey's No. 1 Burmeister in SW cor. of Sec. 14, Blk. 1, C.H.&H. Ry. Sur. ..... T.D. 600 ft.; drlg.

MEDINA COUNTY

James E. Greenlee's No. 1 Feasler, 600 ft. from N line and 2,400 ft. from E line of L. G. Harrison Sur. No. 799 ..... T.D. 1,065 ft.; standing.

F. Ryal's No. 1 G. Martin, 150 ft. from S and W lines of Blk. 368, H. Castro Sur. ..... Spudded in and S.D.

MILAM COUNTY

Bridwell's No. 1 Terry, 1,100 ft. from N line, 800 ft. from W line of tract in Jose Leal Sur. ..... T.D. 1,250 ft.; drlg.

Ed Clark's No. 1 Pritchard, 1,100 ft. to SE lines, 700 ft. to NE lines of 163-ac. tract in F. Ernst Sur., 6½ miles NE Thorndale ..... Rigged up.

M. W. Elser's No. 1 Citizen's Nat. Bank of Waco, 1,325 ft. from S line, 625 ft. from E and W lines of tract in Wm. Punchard Sur. ..... T.D. 2,340 ft.; drlg.

Glass et al's No. 1 Ellison, 700 ft. from N line, 1,350 ft. from W line of 200-ac. tract in Samuel Frost Sur. ... T.D. 1,665 ft.; drlg.

Huff & Keck's No. 1 J. W. Lee, 1,200 ft. to E line, 265 ft. to S line, D. Harmon Sur. ..... T.D. 1,492 ft.; standing.

Michaik & Clark's No. 1 Johnson, 60 ft. S of No. 1 Johnson on 100-ac. lease in Juan Jose Acosta Sur. .... T.D. 2,208 ft.; S.D.

M. C. Moore et al's No. 1 H. A. Camp, east of San Gabriel ..... T.D. 1,085 ft.; drlg.

Wilder, Van Huss & Edilston's No. 1 Von Groton in M. J. Delgado Sur. ..... T.D. 2,870 ft.; drlg.

NUECES COUNTY

Gulf Port Oil Co.'s No. 1 Luby, 2,044 ft. from E line, 2,142 ft. from S line of John M. Luby, 531.74 acres, Blk. 1 of Mary J. Luby Share 1-G of Anna Collins Petronilla pasture, 24 miles SW from Corpus Christi .. T.D. 2,427 ft.; drlg.

Miller et al's No. 1 Harney, 200 ft. from NW line, 1,850 ft. from SW line of 445-ac. tract in Gregoria Farias Sur. ..... Moving in tools.

George Noble's No. 1 Homeland Syndicate, 300 ft. to SE and SW lines of Blk. 8, Sec. 12, 5 miles S Corpus Christi ..... Location.

ROBERTSON COUNTY

Everts Drilling Co.'s No. 1 Cook ..... Drlg. 1,420 ft.

SAN PATRICIO COUNTY

Chiltipin Oil & Gas Co.'s No. 1 E. H. Welder, 1,750 ft. from N line, 660 ft. from W line of tract in Blk. 5, Portilloc Sur. ..... Location.

STARR COUNTY

Adams & Modest's No. 1 Wood, 2,070 ft. from W line of Porcion 84, Camargo, and 1,472 ft. N of Missouri Pacific Railroad ..... Derrick.

Hartshorn et al's No. 1 Hinijosa, 835 ft. W of Hebbronville road and 2,500 ft. from S line of Porcion 110 .... Location.

B.&B. Oil Co.'s No. 1 Crown Brick & Tile Co., 1,800 ft. S of State Highway No. 4 and 580 ft. from W line of Porcion 87, near La Puerta ..... Rigging up.

D. H. Carpenter's No. 1 Salinas, 3,087 ft. from N line, 1,221 ft. from E line of Share 85 of partition of Porcions 38, 39, 40 in Jurisdiction of Reynosa ..... T.D. 250 ft.; set csg.

W. P. Chancellor's No. 1 A. Guerra, 24,000 ft. N of SW cor. and 2,600 ft. from W line of Share 6 in the Joe Grant Sur. ..... **Rigging up.**

Coastal O. & G. Co.'s No. 1 Kelsey Bass, 448 ft. to N line, 150 ft. to W line of Tract 52, Sur. 2, Porcion 86 .. T.D. 1,790 ft.; drlg.

W. T. Gilman & Travelers Oil Co.'s No. 1 C. Ramos, 1,170 ft. from SW line, 1,470 ft. from NW lines of Sur. No. 150 ..... Spudded in and S.D.

Great Plains Oil Co.'s No. 1 Sanchez, 660 ft. from W line, 330 ft. from S line of SE of NW of Sur. No. 344 ..... Rigging up.

H. C. Harter's No. 1 Gonzales, 990 ft. from N line, 1,150 ft. from E line of Share 62-B of Subd. of Porcions 70 and 71, Jurisdiction of Mier ..... T.D. 410 ft.; standing.

Jeffries and Lambeth Drilling Co.'s No. 1 Starr County Cattle Co., 11,572 ft. from N line, 2,490 ft. from E line of Porcion 89, Jurisdiction of Camargo ..... T.D. 600 ft.; resumed drlg.

LaJoya Oil & Gas Co., making location in Porcion 29 in NE part of county ..... Location.

Morrison et al's No. 1 V. G. Guerra, 1,980 ft. from SW line, 450 ft. from SE line of Sur. No. 23 ..... T.D. 400 ft.; drlg.

Doyno Pioneer Co.'s No. 1 Salinas, 3,087 ft. from N line, 1,230 ft. from E line of Share 85, Porcions 38, 39, 40, Reynosa grant ..... Dropped; duplicate of D. H. Carpenter's No. 1 Salinas.

John Pope, trustee's No. 2 H. Gonzales, 150 ft. W of cen. of E line of Sur. No. 339 ..... Location.

Smith et al's No. 1 Lopez, 200 ft. from E line, 1,000 ft. from S line of Blk. 20, Share 65 of Porcion 80, Jurisdiction of Camargo ..... T.D. 1,515 ft.; drlg.

George Stobaugh's No. 1 Seabury et al, 150 ft. from S and W lines of Porcion 107 ..... T.D. 278 ft.; no report.

TRAVIS COUNTY

E. A. Field's No. 1 B. H. Bloor, 150 ft. from S line, 500 ft. from W line of 400-ac. tract in NE part of county .. T.D. 510 ft.; drlg.

Fritz Fuch's No. 1 Swedish, 2,350 ft. from NE line, 750 ft. from NW line of Thomas Smith Sur. ..... T.D. 1,788 ft.; S.D.

UVALDE COUNTY

J. V. Scoggin's No. 1 Olive Henry, 1,100 ft. from N and E lines of tract in Hugh Kilgore Sur. ..... T.D. 510 ft.; drlg.

WEBB COUNTY

J. W. Edwards' No. 1 M. D. Slator, 1,320 ft. to NE and NW lines of Blk. 72, Slator Subd. of J. V. Borrego grant ..... Location.

O. W. Killam's No. 1 E. Garcia, cen. Blk. 2, Sur. 461, W from Mirando City ..... T.D. 2,453 ft.; abnd.

Newton Drilling Co.'s No. 1 A. Garcia, 2,550 ft. from S line, 2,340 ft. from W line of Sur. No. 52, 2 miles SW of Carolina Texas Field ..... T.D. 2,080 ft.; drlg., shows oil.

Norden & Morris' No. 4 Gates, 2,900 ft. from E line, 3,700 ft. from S line of Sur. No. 116 ..... T.D. 1,397 ft.; abnd.

WILLIAMSON COUNTY

McLean et al's No. 2 R. C. Miller, 800 ft. to S line, 100 ft. to W line of tract in B. Manlove Sur. ..... T.D. 940 ft.; S.D.

ZAPATA COUNTY

C. B. Bunte, Inc., et al's No. 1 Gutierrez, cen. of S half NW Blk. 5, Jose V. Borrego grant, 8 miles NE San Ignacio ..... T.D. 1,400 ft.; drlg.

Donohoo et al's No. 1-A Garcia, 150 ft. from NE and SE lines of Blk. 7 of Subd. of 700-ac. of Share A, Charco Redondo grant ..... T.D. 1,085 ft.; standing.

Huff & Fudge's No. 1 Uribe, 150 ft. from NW and SW lines of Blk. 8, Share 7, Partition 6, San Ignacio Subd. of Borrego grant ..... T.D. 300 ft.; standing.
F. J. Ossenbeck's No. 1 Adelfonso Rameriz, 600 ft. W of Zapata-Roma highway, 150 ft. from SE line of Porcion 18 ..... Location.
Phelps, Taegel & Leyendecker's No. 1 Martinez, 150 ft. to N and W lines of Blk. 15 of S. T. Phelps, Jr. Subd. "A" of Villa grant ..... Location.
H. L. Sargent et al's No. 1 Antonio Gutierrez heirs, 922 ft. from W line, 472 ft. from S line of Tract 2, Blk. 5, Nixon Subd., Porcion 10, San Ignacio Borrego grant ..... T.D. 1,432 ft.; drlg.
Stevens & Pope's No. 1 Martinez, 150 ft. from S and E lines of Blk. 95, C. H. Sprague Subd. of Sur. 434..... T.D. 262 ft.; abnd.
Winch & Billings' No. 1 S. Benavides, 1,018 ft. from NW line, 1,107 ft. from NE line of Blk. 2 of O'Hern & Fansler Subd. of Villa grant ..... T.D. 1,663 ft.; set csg.

ZAVALA COUNTY

Adair & Daniel's No. 1 Gates, 1,320 ft. from N line, 1,220 ft. from E line of Hooper & Wade Sur. No .13.. T.D. 3,215 ft.; resuming drlg.

Southwest Texas Proven Areas

Week Ending October 29

NORMANNA POOL—BEE COUNTY

Company, well, farm name, section and block— Remarks:
Gulf Coast Oil Co.'s No. 5 Hicks, 600 ft. E of Nichols Oil Co.'s No. 2 Hicks ..... Rigging up.

PETTUS FIELD—BEE COUNTY

J. L. Mauldin's No. 2 fee, 945 ft. to S line, 150 ft. to W line of farm, George A. Kerr Sur. ..... Location.

TULETA POOL—BEE COUNTY

Dirks Bros.' No. 1 fee, 165 ft. to S and E lines, Sec. 3, Ragsley Subd., Uranga grant ..... Location.
Taber et al's No. 1 Harris, 150 ft. from N and W lines of Blk. 13, Sec. 13, Ragsley Subd. of Uranga grant .. Moving in rig.
The Texas Company's No. 2 Cox, 250 ft. from S and W lines of SE of SW of SW of Sec. 2, Ragsley Subd. of Uranga tract ..... Location.

GAS RIDGE—BEXAR COUNTY

American Gas Co.'s No. 5 W. H. Kennon, 1,750 ft. from S line, 2,000 ft. from E line of 400-acre tract in Maria F. Rodriguez Sur. ..... T.D. 2,230 ft.; standing.

ECKERT POOL—BEXAR COUNTY

Alamo Nat. Gas Co.'s No. 3 J. H. Gembler, 180 ft. from N and E lines of tract in A. Manachaca Sur. 51. T.D. 1,216 ft.; drlg.
E. M. Carl's No. 1 F. Gembler, 160 ft. from N line, 750 ft. from E line of tract in J. Montez Sur. ..... T.D. 825 ft.; standing.
Gatlin Oil Co.'s No. 15 I. A. Beck, 150 ft. from S and E lines of tract in J. Montez Sur. ..... Location.
Johnson Bros.' No. 1 Elsie Janszen, 150 ft. from SW line, 4,000 ft. from SE line of 139-ac. tract in J. Montez Sur. ..... Rigging up.
W. R. Swearingen's No. 11 Halbardier, 400 ft. SE of No. 10 Halbardier, J. F. Perez Sur. ..... Location.

ALTA MESA POOL—BROOKS COUNTY

Ed East's No. 3 Randolph Garcia, 1,000 ft. from S line, 200 ft. from W line of 2,161-ac. tract in La Escantada grant ..... T.D. 100 ft.; drlg.

DUNLAP POOL—CALDWELL COUNTY

dob Rose's No. 2-B Walker 46-ac. tract, 360 ft. from NW line, 500 ft. from SW line of tract in Solomon Seal Sur. ..... T.D. 2,255 ft.; standing.

SALT FLATS—CALDWELL COUNTY

Hickman et al's No. 1 C. A. Dickerson, 150 ft. N of cen. of S line of tract in John D. Rains Sur. ..... T.D. 2,172 ft.; standing.

WEBSTER POOL—CALDWELL COUNTY

C. J. Webster Oil & Gas Co.'s No. 1 C. F. Robertson, 700 ft. from E line, 200 ft. from N line of 100-ac. tract, John A. Neill Sur. ..... Derrick.

NORTH GOVERNMENT WELLS—DUVAL COUNTY

R. B. Byrd's No. 3 Wright, 660 ft. from W line, 330 ft. from N line of Sur. No. 101 ..... Location.
Central Producers, Inc.'s No. 3 Tuck & Johnson, 320 ft. from N and E lines of SE SW of Sur. No. 42 ..... T.D. 2,256 ft.; set csg.
H. H. Coffield's No. 4 Wendt, 330 ft. from N line, 810 ft. from E line of SE of NE of Sur. No. 43 ..... Drlg.
Hamill & Hamill's No. 2 C. W. Hahl, 330 ft. to N and W lines of N half of SE of Sur. No. 42 ..... T.D. 2,313 ft.; set csg.
Hamill & Hamill's No. 6 Hahl, 330 ft. from S and E lines of N half of SE of Sur. No. 42 ..... Spudded in.
Highland Oil Co.'s No. 2 Lundvall, 330 ft. from N and W lines of S half of NE of Sur. 42 ..... **T.D. 2,279 ft.; comp. 200 bbls.**
Luse and others' No. 1 Hahl, 330 ft. from N and W lines of NW SE Sur. 45 ..... T.D. 1,540 ft.; drlg.
Magnolia Pet. Co.'s No. 10 Wendt, 330 ft. from S and E lines of NW SW of Sur. 44 ..... T.D. 2,326 ft.; comp. 60 bbls. hourly.
Magnolia Petroleum Co.'s No. 11 R. Wendt, 330 ft. to N and E lines of NW SW, Sur. 44 ..... Location.
San Diego Oil Corp.'s No. 5 E. Riley, 330 ft. from S and W lines of NW NW of Sur. No. 46 ..... Location.
San Diego Oil Corp.'s No. 2 L. Bennett, 500 ft. N of No. 1, 250 ft. to W line of SE SW of Sur. No. 44.... Spudded in.
San Diego Oil Corp.'s No. 4 E. Riley, 230 ft. from N line, 550 ft. from W line of NW NW of Sur. No. 46.. Rigging up.
San Diego Oil Corp.'s No. 4 O. Bennett, 510 ft. from S line, 330 ft. from E line of NE SW of Sur. No. 44... T.D. 2,229 ft.; set csg.
Southwest Drlg. Co.'s No. 4 R. Wendt, 330 ft. from N and E lines of SE SE of Sur. No. 43 ..... Location.
Southwest Drilling Co.'s No. 5 Wendt, 330 ft. from N and W lines of NE SE, Sur. 43 ..... T.D. 2,289 ft.; comp. 800 bbls. dly.
Seacord & Putnam's No. 1 Wendt, 150 ft. from S and E lines of NE NE of Sur. No. 44 ..... T.D. 2,313 ft.; comp., flowed 56 bbls. hr. on ¼-in. choke.
The Texas Co.'s No. 1 C. W. Freer, 150 ft. from S and E lines of SE NE of Sur. No. 45 ..... Location.
The Texas Co.'s No. 2 M. B. Johnson, 330 ft. from N and E lines of S half S half NW of Sur. 42 ..... T.D. 2,227 ft.; set csg.
The Texas Company's No. 3 M. B. Johnson, 330 ft. to E line, 990 ft. to S line of NE SW, Sur. 42 ..... Location.
Whisenant, Trenchard and French Oil Co.'s No. 3 Hahl, 620 ft. from S line, 250 ft. from E line of SW of SW of Sur. No. 44 ..... Location.

SOUTH GOVERNMENT WELLS FIELD—DUVAL COUNTY

Humble Oil & Refining Co.'s No. 8 Paul White, 1,650 ft. to W line, 4,290 ft. to S line, Sur. 58 ..... Derrick.
Humble Oil & Refining Co.'s No. 9 Paul White, 1,320 ft. to W line, 4,950 ft. to S line, Sur. 58 ..... Location.
The Texas Co.'s No. 5 Bishop Cattle Co., 1,750 ft. from W line, 1,020 ft. from S line of Sur. 135 ..... Rigging up.

COLE POOL—DUVAL COUNTY

Cole Pet. Co.'s No. 79 Benavides, 35 ft. from NW line, 77 ft. from NE line of Blk. 12, Sur. 20, Mariana Arispe grant ..... T.D. 1,717 ft.; set csg.
O. W. Killam's No. 23 Bruni, 50 ft. from NW and SW lines of Blk. 34, Sec. 8 of Adams Subd. of Bruni lands in the Arispe Grant Sur. ..... T.D. 3,039 ft.; plugged back to 2,490 ft.

SARNOSA FIELD—DUVAL COUNTY

John F. Camp's No. 2 Well, 1,200 ft. N, 18 deg. W of No. 1 Well in Sur. No. 570 ..... T.D. 2,601 ft.; abnd.
Sarnosa Oil Corp.'s No. 3 Well, 120 ft. SE and 660 ft. NE of No. 2 in Sur. No. 130 ..... Spudded in.
Sarnosa Oil Corp.'s No. 4 Well, 330 ft. NW and 660 ft. NE of No. 3 in Sur. No. 130 ..... Location.
Smith & Capps' No. 4 Duval County Ranch Co., Sur. 576.. T.D. 2,340 ft.; set csg., waiting on cement.
Sun Oil Co.'s No. 2 Cuellar (Cano), 150 ft. from SW and SE lines of E quarter of Sur. No. 576..... Rigged up.

SAL-MAR FIELD—GUADALUPE COUNTY

Sal-Mar Oil & Gas Co.'s No. 1 Hempel, 1,600 ft. from S line, 150 ft. from E line of tract in G. W. Williams Sur. ..... T.D. 2,177 ft.; standing.
A .W. Wormser's No. 1 Harris, 150 ft. from N line of tract and 150 ft. E of creek in Green Dewitt Sur..... Derrick.

HORD'S CREEK—GOLIAD COUNTY

Slick-Seeligson, Inc.'s No. 11 Kaufman, 660 ft. from SE line, 330 ft. from SW line of 4,265-ac. tract..... Drlg. 4,471 ft.; coring.

SLICK POOL—GOLIAD COUNTY

Slick-Seeligson's No. 2 Poetter, 330 ft. to SE and SW lines, 1,200 ft. SW of No. 1, Obid Marshall Sur. ..... T.D. 4.285 ft.; coring.

ALWORTH FIELD—JIM HOGG COUNTY

H. C. Cate's No. 1 B. J. Leyendecker, 70 ft. to E line, 320 ft. to S line, Blk. 10, Sur. 143 ..... T.D. 20 ft.; spudded in and standing.

SANDIA POOL—JIM WELLS COUNTY

Hughes and Long's No. 1 Wade, cen. of Blk. 2 of Wade Ranch Subd. ..... Changing rigs.
Larcro Gas & Pet. Co.'s No. 3 Wade, 2,000 ft. S, 33 deg. W of No. 2 Wade, thence 1,970 ft. N, 57 deg. W.... Material on ground.

JACOB POOL—McMULLEN COUNTY

Jacob, Buzzini & Pickett's No. 7-A, W. H. Jacob, Sur. No. 10, W. H. Jacob ..... T.D. 960 ft.; comp. 100 bbls.
Jacob, Buzzini & Pickett's No. 8-A Jacob, 660 ft. N of No. 2-A Jacob ..... Rigging up.
F. B. Lefevre's No. 1 Leonard Jacob, 8,107 ft. S, 51 deg. W of E cor. and 1,697 ft. N, 39 deg. W, of SE line of W. D. Benham Sur. ..... Spudded in.
Longhorn Oil Co. and American Gas Co.'s No. 1 Lark, 2,790 ft. from N line, 1,150 ft. from W line of Lark tract, E. W. B. Scrugham Sur. ..... T.D. 1,026 ft.; comp. 75 bbls.

WENTZ POOL—McMULLEN COUNTY

V. G. Schimmel's No. 1 Wolfe, 400 ft. from E line, 360 ft. from N line of Sur. 65 ..... Moving in.

ADAMS FIELD—MEDINA COUNTY

Vantis Oil Co.'s No. 1-A Adams, 50 ft. from No. 1 ..... T.D. 200 ft.; drlg.

SAXET FIELD—NUECES COUNTY

Houston Oil Co.'s No. 1 Walton, 170 ft. from N line, 220 ft. from E line of 500-ac. tract ..... T.D. 4,030 ft.; drlg.
Gibson Oil Co.'s No. 1 Ran Morgan, 330 ft. from S and E lines of E 80 acres of Ran Morgan's 320 acres in B.S.&F. Sur. No. 405 ..... Rigging up.
Gulf Coast Oil Co.'s No. 2 Bessie Elder, 300 ft. to S and E lines of Lot 29, Shepard Subd. of John Dunn Sur. No. 312 ..... T.D. 3,000 ft.; reinstated; drlg.
Gulf Port Oil Co.'s No. 1 Isebcee, 330 ft. to N and W lines of 300-ac. tract in C. Land Sur. ..... Location.
Gulf Port Oil Co.'s No. 3 Frank Bliss, 1,699 ft. to N line, 350 ft. to E line of 235-ac. tract in J. W. Stevens Sur. No. 406 ..... Location.
Gulf Coast Oil Co.'s No. 1 W. L. Dinn, 330 ft. from N and E lines of lease in School Sur. No. 412 ..... T.D. 4,968 ft.; abnd.
Oso Drillers, Inc.'s No. 3 Roark, midway between Nos. 1 and 2 ..... T.D. 4,867 ft.; tested 1,800 lbs. gas, estimated 40,000,000 ft.
Saxet Oil Co.'s No. 9 Dunn, 180 ft. from N line, 164 ft. from W line of lease, south offset to Oso Drillers' No. 2 Roark ..... Rigging up.
O. R. Seagraves' No. 1 Lagasse, 330 ft. from N and W lines of Blk. 22, of H. B. Shepherd farm lots..... Rigging up.
Titus & Calloway's No. 1 Lagasse, 2,200 ft. from N line, 2,400 ft. from E line of J. M. Stevens Sur. No. 406... Spudded in.
Titus & Calloway's No. 2 Lagasse, 950 ft. from N line, 400 ft. from E line of J. M. Stevens Sur. No. 406.... Spudded in.
Titus & Calloway's No. 3 Lagasse, 330 ft. from N and W lines of E half of Blk. 25 of Shepherd farm lots.. Derrick.
Titus & Calloway's No. 1 Hutchins, 500 ft. from N line, 1,500 ft. from W line of Blk. 19, Shepherd farm lots.. Rigging up.
Titus & Calloway's No. 1 Ran Morgan, 330 ft. from N and E lines of W 80 acres of E 160 acres of N half of 423 acres of B.S.&F. Sur. No. 402 ..... Derrick.

LOS OLMOS POOL—STARR COUNTY

V. V. Combs' No. 1 Kelsey Bass, 150 ft. from N and W lines of NE NE of Sec. 6, Porcions 75, 76 and 77.... Location.
Frank Doyno's No. 1 Seabury, 450 ft. from S line, 815 ft. from E line of 80-ac. tract in Share 5, of W portion of Porcion 75 ..... T.D. 398 ft.; set csg.
J. E. Harper & Co.'s No. 1 E. Salinas, 150 ft. to S and E lines of 40-ac. tract in Share 16, Por. 75 ..... Location.
Hornaday-Porter's No. 1 Kelsey Bass, 150 ft. from S and W lines of NW NE Sec. 7 of Subd. of Porcions 75, 76, 77, Jurisdiction of Camargo ..... T.D. 210 ft.; drlg.
Keck & Keane's No. 1 Kelsey Bass, 150 ft. from E line, 300 ft. from N line of W 10 acres of SE NW Sec. 6, Subd. of Porcions 75, 76, 77, Jurisdiction of Camargo.. Spudded in.
Keck & Keane's No. 2 Kelsey Bass, 150 ft. from N and W lines of NE NE Sec. 6 of Subd. of Porcions 75, 76, 77, Jurisdiction of Camargo ..... Location.
Los Olmos Oil & Gas Co.'s No. 27 Kelsey Bass, on S line, and 844 ft. from E line of Sec. 7 of Subd. of Porcions 75, 76, 77, Jurisdiction of Camargo..... T.D. 210 ft.; drlg.
Los Olmos Oil & Gas Co.'s No. 28 Kelsey Bass, 200 ft. from N line, 60 ft. from W line of NE SW Sec. 7, Subd. of Porcions 75, 76, 77, Jurisdiction of Camargo.. T.D. 205 ft.; drlg.
Los Olmos Oil & Gas Co.'s No. 29 Kelsey Bass, 60 ft. from E line, 600 ft. from N line of NE SW of Subd. or Porcions 75, 76, 77, Jurisdiction of Camargo..... T.D. 190 ft.; drlg.
R. A. Mitchell's No. 1 Kelsey Bass, 150 ft. from S and W lines of NW SE of Sur. 8, Subd. Porcions 75, 76, 77, Jurisdiction of Camargo ..... Location.
J. P. Moore and C. B. Van Matre's No. 1 Seabury et al, 150 ft. from E line, 750 ft. from S line of Share 5, Subd. of W part of Porcion 75 ..... T.D. 157 ft.; drlg.
Munday Bros.' No. 1 Seabury, 840 ft. from E line, 4,550 ft. from S line of Share 5, Subd. of W two-thirds of Porcion 75, Jurisdiction of Camargo ..... Rigging up.
C. L. Sinclair's No. 1 Kelsey Bass, 150 ft. from S and E lines of SW SW Sec. 5, Subd. of Porcions 75, 76, 77, Jurisdiction of Camargo ..... Drlg.
Tarver & Nance, Inc.'s No. 6 Kelsey Bass, 750 ft. from W line, 150 ft. from S line of SW SE of Sur. 7, Porcions 75, 76, 77 of Camargo Sur. ..... T.D. 355 ft.; drlg.
Tollen, Floyd & Warner's No. 1 Seabury, 450 ft. from S line, 814 ft. from E line of 80-ac. tract in Share 5, W part of Porcion 75 ..... T.D. 389 ft.; set csg.

RIO GRANDE CITY POOL—STARR COUNTY

Allison & Doyle's No. 1 Salines, 150 ft. to N and E lines of Blk. 2, Share 15-B, Porcions 80 and 81, Camargo... T.D. 1,472 ft.; coring.
Mundy and others' No. 1 Salines, 190 ft. to S and W lines of Blk. 12, Share C-38, Porcions 80 and 81, Camargo ..... T.D. 210 ft.; drlg.
Meyers & McCaghren's No. 2-A Frank Doyno, 500 ft. to S line, 768 ft. to W line of Blk. 4, Share A-77, Porcions 80 and 81 ..... T.D. 1,462 ft.; comp. 50 bbls.
Meyers and McCaghren's No. 3 Frank Doyno, 796 ft. from S line, 720 ft. from W line of Blk. 4, Share 77-A, Subd. of Porcions 80 and 81, Jurisdiction of Camargo ..... Location.
S. S. Smith's No. 1 O'Meara in Share 76 in W half of Porcion 79, Jurisdiction of Camargo ..... T.D. 1,650 ft.; no report.

LAUREL POOL—WEBB COUNTY

Montex Oil Co.'s No. 1 M. Vela, 479 ft. from N line, 490 ft. from W line of Blk. 4, Sur. No. 267 ..... Coring 685 ft.
South Texas Oil Co.'s No. 1 Laurel, 44 ft. from N line, 150 ft. from W line of Blk. 10, Sur. 270 ..... T.D. 2,267 ft.; comp. 1,000 bbls.

CHARCO REDONDO POOL—ZAPATA COUNTY

Windsor Oil Co.'s No. 1 Martinez, in NE of Blk. 15, of W. R. Duke Subd., Charco Redondo grant ..... T.D. 2,005 ft.; abnd.

ESCOBAS POOL—ZAPATA COUNTY

Allied Oil & Gas Co.'s No. 12 Gutierres, 3,663 ft. from SE lines, 750 ft. from NE lines of Share 4, Comitas grant ..... T.D. 100 ft.; standing.
The Texas Co.'s No. 14 Measles in Cerrito Blanco grant.. Drlg.
Trevino Oil Corp.'s No. 17-A I. G. Trevino, 150 ft. to NW lines, 1,617 ft. to SW lines, Blk. 5, Sur. 65 ..... T.D. 1,100 ft.; coring.
John Ward's No. 1 M. Garza estate, 150 ft. from NW and NE lines of Blk. 31, Douglas Subd. of Zorro ranch, Comitas grant ..... Location.

MARTINEZ POOL—ZAPATA COUNTY

H. Muckelroy, Jr.'s No. 1 A. Trevino, 150 ft. from S and E lines of Blk. 10, Sur. No. 411 ..... T.D. 2,014 ft.; tested salt water and show of oil.

Wildcat Operations in Louisiana-Arkansas

(Continued from Page 56)

DESOTO PARISH

Coker et al's No. 1 Boone, 200 ft. N and W, SE cor. SW NW, Sec. 13-10-11 ..... S.D. 60 ft.
Donley & Chastain's No. 1 H. Smith, 325 ft. W, 600 ft. N, SE cor., Sec. 31-14-15 ..... S.D. 2,470 ft.
Honeycut O. & G. Co.'s No. 1 Porter, 423 ft. S, 414 ft. W, NE cor. NW NE, Sec. 26-12-13..... Coring 2,409 ft.
S. A. Guy's No. 1 Dowling, 469 ft. E, 383 ft. S, NW cor. NE, Sec. 31-14-14 ..... S.D. 3,068 ft.
Mrs. A. L. Ibach, tr.'s No. 1 Rambin, 250 ft. S and E, NW cor. NE NE, Sec. 32-11-11 ..... Derrick.
E. T. Oakes' No. 1 R. H. Bryant et al, 200 ft. N and W, SE cor. NE NW, Sec. 30-13-15..... Coring 4,266 ft.
DeSoto Dev. Co.'s No. 1 Nickey, Sec. 7-13-13..... Partly rigged up and S.D.
G. C. Smith et al's No. 1 Wollums, 330 ft. N and W, SE cor. Sec. 30-12-13 ..... S.D. 1,360 ft.
E. J. Stamberry's No. 1 Naborton O. & G. Co., Sec. 32-13-11 ..... S.D. for wtr. 800 ft.
State Drlg. & Prod. Co.'s No. 1 Wemple, 330 ft. N and E, SW cor. NW SW, Sec. 14-12-11..... Derrick.
Walters-Nicholson, tr.'s No. 1 Jim Guy, Sec. 3-11-13.... W.O.S.R. 2,767 ft.
Warren & Craig's No. 1 J. A. Wagner, 150 ft. S and W, from C, Sec. 5-13-14..... Set 10-in. 100 ft.
Jack Whitson's No. 1 Sanders, 330 ft. N and E, SW cor., Sec. 19-11-13 ..... Drlg. plug; T.D. 1,465 ft.

GRANT PARISH

A. W. Phillips, tr.'s No. 1 Cameron, 300 ft. N, 200 ft. E, SW cor. SW NW, Sec. 26-7-3w..... Location.
O. Robichaux's No. 1 T. M. Bradford, 1,870 ft. E, 314 ft. S, NW cor., Sec. 14-9n-1e ..... Derrick.

LINCOLN PARISH

Loring Oil Co.'s No. 1 Simonton, 300 ft. N, 480 ft. E, SW cor. SE NE, Sec. 25-20-4w..... Set 12½-in. 500 ft.

MOREHOUSE PARISH

Feazel & Kaill's No. 1 Davenport, Sec. 28-21-4e..... S.D. 2,510 ft.
H. W. Snowden's No. 1 Meyers, 330 ft. S and E, SW cor. NE NE, Sec. 18-23-7e..... S.D. 30 ft.

NATCHITOCHES PARISH

Allender & Rasmussen's No. 1 Cane River, 330 ft. N and W, SE cor., Sec. 61-6n-5w..... S.D. 30 ft.
W. M. Coates' No. 1 Ross Olive, Sec. 10-9-10, 660 ft. S and E from cen. of Sec. ..... S.D. 2,010 ft.
Dr. H. S. Gerson's No. 1 Smith, Sec. 11-10-8, 2,000 ft. N, NE cor. of irregular Sec. 10, in Sec. 11..... **T.A. 1,875 ft.**
Dr. H. S. Gerson's No. 3 Smith, approximately 1,000 ft. N of NE cor. of irregular Section 10, Sec. 11-10n-8w. Set 6-in. 450 ft.
J. B. Oil Co.'s No. 1 Hankins et al, Sec. 67-10-7..... Drlg. 400 ft.
R. A. Keaton's No. 1 Bastrop State Bank, 200 ft. N and W, SE cor. NE NW, Sec. 17-10-6 ..... Location.
R. A. Keaton's No. 1 Stephens, Sec. 25-10-6, 320 ft. N and W, SE cor. NW NW..... S.D. 1,700 ft.
Natchitoches Pet. Co.'s No. 1 Edenbarn, 2,340 ft. W, 1,320 ft. S, NE cor., Sec. 4-11-6w..... S.D. 2,234 ft.
E. W. Perritt's No. 1 Cook, 165 ft. E, 105 ft. N, SW cor. NE SW, Sec. 3-8-9..... S.D. 2,993 ft.
Sabine Bayou Dev. Co.'s No. 1,130 Caw, 330 ft. N and E, SW cor. SE, Sec. 9-12-5 ..... Drlg. 2,546 ft.
Texana Oil Co.'s No. 1 Clark-Morris Lbr. Co., 878 ft. N, 540 ft. E, C, Sec. 23-5-6 ..... Set 6⅝-in. 3,407 ft; T.D. 3,475 ft.

OUACHITA PARISH

Monroe Oil & Royalties Co.'s No. 1 Thieler, 150 ft. N and E, SW cor. SE NW, Sec. 34-18-2e ..... Washing to bottom 2,350 ft.
Wilson & Mitchell's No. 1 Williams, Sec. 5-16-1e, 330 ft. E, 340 ft. S, NW cor. SW SE..... S.D. 3,480 ft.

RED RIVER PARISH

Edward & Clay's No. 1 Delta Pecan Co., 1,600 ft. N, 450 ft. E, SW cor., Sec. 27-13-11..... Drlg. 827 ft.
Lawrence Decker, tr.'s No. 1 Maddox, 1,650 ft. S and W, NE cor., Sec. 21-14-10 ..... S.D. 2,800 ft.

SABINE PARISH

Adams & Roberson's No. 1 Peterson, 406 ft. N, 200 ft. W, SE cor. NE NE, Sec. 35-8-13 ..... S.D. 100 ft.
Bridwell O. & G. Co.'s No. 1 Stills, 200 ft. S and W, NE cor. SW NE, Sec. 16-7-11 ..... Dry and abd. 2,657 ft.
R. E. Brooke's No. 1 A. Gray, 330 ft. N and W, SE cor. SW NE, Sec. 35-8-13 ..... Location.
John R. Bunn's No. 1 Sabine Lbr. Co., 295 ft. S, 386 ft. W, NE cor. SW NE, Sec. 9-7-13..... S.D. 2,422 ft.
Byers et al's No. 1 Bishop, SW cor. SW NE, Sec. 16-7-13 ..... S.D. 41 ft.
Cloud & Bolin's No. 1 Bowman-Hicks, SE cor. NE NE, Sec. 26-9-13 ..... Set 8⅝-in. 1,705 ft; T.D. 1,715 ft.
Coates Pet. Co.'s No. 2 Stills, 330 ft. N and E, SW cor. SE SW, Sec. 35-8-11 ..... W.O.S.R. 2,465 ft
Coates Pet. Co.'s No. 3 Stills, 330 ft. N and E, SW cor., Sec. 35-8-13 ..... Location.
Mark Curtis et al's No. 1 Sabine Lbr. Co., 330 ft. N and W, SE cor. NE SE, Sec. 35-8-13 ..... S.D. 2,400 ft.
S. Q. Daniels' No. 1 Armstrong, SE cor. SE NE, Sec. 21-8-10 ..... Derrick.
Mrs. Dabney's No. 1 Hill, 305 ft. N, 235 ft. W, SE cor. NE NE, Sec. 5-7-11 ..... Location.
Mrs. Dabney's No. 2 Hill, 230 ft. S, 235 ft. W, NE cor., Sec. 5-7-11 ..... Location.
Flinchbaugh & Myers' No. 1 Aaron, 350 ft. S and E, NW cor., Sec. 32-9-13..... Rigging up.
R. L. Gay, tr.'s No. 12 Bowman-Hicks, 330 ft. S, 390 ft. W, NE cor. SW SW, Sec. 14-7-14..... S.D. 2,791 ft.
R. L. Gay, tr.'s No. 1-A Long Bell Lbr. Co., 430 ft. S, 200 ft. W, NE cor. NW NW, Sec. 10-8-13..... Washing to bottom 6,482 ft.
Gibson & Johnson, Inc.'s No. 1 Frost Lbr., 330 ft. S and E, from center Sec. 19-9-13..... Comp. pumping 40 bbls. 1,625 ft.
Gibson & Johnson, Inc.'s No. 2 Frost Lbr., 330 ft. S and W, NE cor. NW NE, Sec. 19-9-13..... Arranging to set 6⅝-in. 1,484 ft.
W. N. Hankins' No. 1 Tilloy, 200 ft. E, 30 ft. S, NW cor. SE SE, Sec. 36-8-12 ..... S.D. 2,162 ft.
Hollis et al's No. 1 Sabine State Bank, 350 ft. N and W, SE cor. SW SW, Sec. 28-8-11..... S.D. 1,025 ft.
Ab Jones' No. 1 Garcia, 200 ft. S and W, NE cor. NW SE, Sec. 4-7-12 ..... Set 6-in. 2,070 ft.
G. R. Jordan's No. 1 Dew, 330 ft. N, 340 ft. E, SW cor. SW SE, Sec. 34-8-11 ..... S.D. for wtr. 950 ft.
E. P. Kilgore's No. 1 Thomas, 330 ft. S, 200 ft. E, NW cor. SE, Sec. 30-8-11..... Drlg. 2,241 ft.
Lane, Bundy & Allen's No. 1 Andree, Sec. 23-7-11..... Derrick.
LeGrand's No. 1 McGough, Sec. 3-8-10..... Drlg. plug 2,180 ft; T.D. 2,200 ft.
C. D. Loe, tr.'s No. 1 Whiting, 330 ft. N and W, SE cor. NW NE, Sec. 12-9-14..... Location.
H. C. Maulding's No. 1 Moores, 330 ft. S and W, NE cor. SE NE Sec. 16-7-13 ..... Drlg. 2,270 ft.
Ben Merritt's No. 1 Lucins, 400 ft. N, 378 ft. E, SW cor. SW NE, Sec. 4-5-12..... Derrick.
Paul L. Miller, tr.'s No. 1 Chadick, 550 ft. S, 178 ft. E, NW cor. NE SW, Sec. 32-8-10..... W.O.S.R. 2,589 ft.
E. F. Neely's No. 1 Rains, 660 ft. N, 100 ft. W, SE cor., SW NW, Sec. 14-7-11 ..... W.O.S.R. 2,541 ft.
W. M. Neely's No. 1 Buvens, 350 ft. S, 100 ft. E, NW cor. NE, Sec. 21-7-11..... Waiting on csg. 2,455 ft.
C. D. Neff, tr.'s No. 1 Snell, Sec. 9-7-11, 350 ft. N, 660 ft. W, SE cor. Sec. ..... W.O.S.R. 2,509 ft.
H. W. Perritt's No. 2 Brown Lbr. Co., 519 ft. S, 455 ft. W, NE cor. NW NE, Sec. 31-8-10..... S.D. 400 ft.
Roy Raines et al's No. 1 Beard, 720 ft. E, 700 ft. N, SW cor. SW SE, Sec. 8-8-10..... Derrick.
Reeves & McNeely's No. 1 Ponder, 330 ft. N and W from C, Sec. 15-7-11..... Moving in rig.
Thornton et al's No. 1 S. S. Martinez, 355 ft. S, 330 ft. W, NE cor. SE NE, Sec. 4-7-13 ..... S.D. 2,048 ft.
Otis A. Roberts' No. 1 Sabine Lbr. Co., 324 ft. S, 451 ft. W, NE cor. SW NE, Sec. 5-7-13 ..... C.O. hole 2,500 ft.
Roberts & Sledge's No. 1 La. Long Leaf Lbr. Co., 290 ft. N, 468 ft. E, SW cor. NE SE, Sec. 29-8-10..... Derrick pattern.
Roberts & Sledge's No. 2 Sabine Lbr. Co., 803 ft. W, 796 ft. N, SE cor. SE SW, Sec. 5-7-13 ..... W.O.S.R. 2,480 ft.
Roshko & Labarre's No. 1 Maines, 427 ft. E, 114 ft. N, SW cor. SE NE, Sec. 35-8-11..... Rigging up.
Skidmore & Mize's No. 1 Stoker, 440 ft. N, 225 ft. E, SW cor. SE NW, Sec. 33-8-10..... S.D. for wtr. 920 ft.
C. W. Smith et al's No. 1 Pattison, 330 ft. S and E, NW cor. SE NW, Sec. 33-10-11..... Derrick.
Sneed & Sneed's No. 1 Pearce, 200 ft. N, 215 ft. E, SW cor. NE SW, Sec. 35-8-13 ..... S.W. and abd. 2,405 ft.
Southland Drlg. Co.'s No. 1 Frost Lbr. Co., 330 ft. N and W, SE cor. NE NE, Sec. 13-9-11..... S.D. 1,920 ft.
H. B. Stacey et al's No. 1 Hefkobita, 457 ft. N, 583 ft. E, SW cor. SE, Sec. 34-8-13 ..... S.D. 2,568 ft.
A. F. Tarver's No. 3 Cutrer, Sec. 13-7-11, 1,120 ft. E, 300 ft. N, SW cor. NW..... S.W. and abd. 2,600 ft.
Thornton et al's No. 2 S. S. Martinez, 312 ft. E, 208 ft. S, NW cor. SE NE, Sec. 4-7-13 ..... Location.
Triangle Drlg. Co.'s No. 1 La.-Long Leaf Lbr. Co., 330 ft. N and W, SE cor. Sec. 11-6-11 ..... S.D. 4,013 ft.
Tuffree et al's No. 1 T. L. Andries, N½ NE SE, Sec. 15-7-11 ..... Rig moved and abd. 100 ft.
W. M. Ungerman's No. 1 F. Cross, 53 ft. S, 146 ft. W, NE cor. SW SE, Sec. 25-8-11..... Moving in rig.

TENSAS PARISH

H. V. Schumacker's No. 1 Currey, 1,320 ft. S, 1,320 ft. E, NW cor., Sec. 39-11-12..... S.D. 3,645 ft.

UNION PARISH

E. S. Goens et al's No. 1 Frost Lbr. Co., 330 ft. S and E, NW cor., Sec. 17-23-2e..... Location.
Wong Hing, tr.'s No. 1 Union Sawmill Co., 712 ft. W, 246 ft. N, SE cor., Sec. 15-22-1e..... Set 10-in. 70 ft.

VERNON PARISH

Earl Jones' No. 1 Willis, 350 ft. N, 400 ft. E, SW cor. SE SE, Sec. 32-3n-9w..... Derrick.
Liano Co-operative Colony's No. 1 fee, NW NE, Sec. 34-3n-9w ..... S.D. 2,723 ft.

WEBSTER PARISH

George Pearce et al's No. 1 Ambrose, 200 ft. N and W, SE cor SW SE, Sec. 22-20-10 ..... Drlg. 2,800 ft.
R. E. Silvey et al's No. 1 Drake est., C NE NE, Sec. 14-19-10 ..... Derrick.

WEST CARROLL PARISH

Mamie S. McCurry's No. 1 Richard & Donnaw, 300 ft. N and E, SW cor., Sec. 13-19-9e..... Derrick.

WINN PARISH

P.V.T. Oil Co.'s No. 1 Southern Paper Co., 150 ft. S and W, NE cor. SW, Sec. 28-13-3 ..... Repairing derrick 1,050 ft.

Arkansas

CLAY COUNTY

A. C. Jeffus' No. 1 Underwood, 510 ft. N, 350 ft. W, C, NW SE, Sec. 4-20-3 ..... S.D. 1,253 ft.

CLEBURNE COUNTY

Frank S. Craver et al's No. 2 Doniphan Lbr. Co., 700 ft. N, 200 ft. E, SW cor. SW, Sec. 34-11-9..... Drlg. 1,790 ft. (corrected).

COLUMBIA COUNTY

Kendall Oil Co.'s No. 1 Fullenweider, 300 ft. S and E, NW cor. NE NE, Sec. 13-17-22..... Waiting on csg. 2,441 ft.

DREW COUNTY

Co-Operative Dev. Co.'s No. 1 Ogles, Sec. 35-15-5, 330 ft. S and E, NW cor. NE NW..... S.D. 3,378 ft.

LAFAYETTE COUNTY

Fox & Langford's No. 1 Coleman Bros., 330 ft. S and E, NW cor. SE SE, Sec. 25-16-25..... Set 12½-in. 169 ft.
Chas. McDonald's No. 1 Allen, 400 ft. N and W, SE cor. SE SW, Sec. 2-19-26..... Rigging up.
Sam E. Wilson, Jr., No. 1 Smith, 330 ft. N and E, SW cor. NW SE, Sec. 24-19-25..... Derrick pattern.

LINCOLN COUNTY

Lawrence Cook, tr.'s No. 1 McGhee Planting Co., 420 ft. S, 300 ft. W, NE cor. NE SW, Sec. 5-8-7..... Arranging to set 1,000 ft. of 8-in. T.D. 3,250 ft.

LITTLE RIVER COUNTY

American Portland Cement Co.'s No. 1 fee, 150 ft. S and E, NW cor. SW NE, Sec. 21-12-32..... Rigging up.
M. E. Sanderson's No. 1 Hale, 1,200 ft. E, 800 ft. N, SW cor. SE SE, Sec. 22-12-29..... Drlg. 800 ft.

MILLER COUNTY

Dennis & Cubage's No. 1 Head, 150 ft. E, 200 ft. N, SW cor., Sec. 20-15-26..... Rigging up.
Duluth-Ark. Oil Co.'s No. 1 Beck, 150 ft. N, 170 ft. E, SW cor. NW SW, Sec. 34-15-26..... Rigging up.
Goodwin et al's No. 1 E. A. McCowan, NW cor. NW SE, Sec. 22-15-28 ..... Derrick abd.
Fitzwater et al's No. 1 C. J. Norsen, SW cor. SE SW, Sec. 20-15-27 ..... Drlg. 1,950 ft.
Fitzwater et al's No. 2 Beck, 150 ft. N and E, SW cor. SW SE, Sec. 32-15-26..... Moving in rig.
Fitzwater et al's No. 1 Fouke, 150 ft. S and W, NE cor., Sec. 11-17-27 ..... S.D. 105 ft.
Wm. S. King's No. 1 Beck, 330 ft. S and E, NW cor. NE NW, Sec. 35-15-26..... Coring 2,926 ft.
Chas. B. Lenz's No. 1 Dean, 125 ft. E, 200 ft. S, NW cor. SE Sec. 19-15s-25w..... Drlg. shale 1,250 ft.
W. E. Noel et al's No. 1 Dickson hrs., 1,980 ft. W, 330 ft. S, NE cor. Sec. 11-20-27..... S.D; W.O. 2,600 ft
John C. Rogers' No. 1 Price, 230 ft. S, 400 ft. E, NW cor. NW NW, Sec. 17-16-25..... Rigging up.
Bob Simmons' No. 1 Lamb, NE NW NW, Sec. 14-16-27 Derrick.
Sorrells & Tidwell's No. 1 Roy McCowan, 660 ft. S and E, NW cor. NW SE, Sec. 22-15-28..... Set 10-in. 106 ft.

OUACHITA COUNTY

McLeon et al's No. 1 L. D. Neely, Sec. 23-15-16, 200 ft. N and W, SE cor. NE SW..... S.D. 150 ft.
Chas. Steele et al's No. 1 Anderson, 155 ft. S, 150 ft. E, from center Section 36-12-18 ..... T.D. 1,015 ft.

PIKE COUNTY

E. R. Henderson's No. 1 J. L. Lee, 400 ft. S, 350 ft. E, NW cor. SW SE, Sec. 31-8-24..... S.D.; W.O. 1,020 ft.

S. B. Henderson's No. 1 W. B. East, 200 ft. S. 150 ft. W, NE cor., Sec. 13-9-33.....S.D.; rig.

PRAIRIE COUNTY

Powell Creek O. & G. Co.'s No. 1 Kloss, NE SW, Sec. 3-4n-6w.....Partly rigged up and S.D

ST. FRANCIS COUNTY

S. B. Henderson's No. 1 Britton, Sec. 1-4-1e, 1,000 ft. S and E NW cor. NE NW.....Drlg. hard shale 3,687 ft.

UNION COUNTY

S. H. Adams' No. 1 Murphy, NE cor. NW NE, Sec. 31-16-14.....Location.

Cox et al's No. 1 Goodwin, 360 ft. S, 180 ft. W, NE cor. SW SW, Sec. 3-16-16.....S.D. 140 ft.

S. H. Helms' No. 1 C. H. Murphy, NE cor. NW NE, Sec. 31-16-14.....Rigged up and S.D.

Wilson & Chapman's No. 1 King, Sec. 3-18-13, 330 ft. N and E, SW cor. NE NE.....Derrick.

Wilson & Chapman's No. 1-A D. Norman, 330 ft. S and E, NW cor. N½ NE SE, Sec. 3-18-13.....S.D. 1,678 ft.

WASHINGTON COUNTY

(Cable tools)

A. B. Chase and Ed Rogers' No. 1 Cunningham, 125 ft. S, 300 ft. W, NE cor. SW NE, Sec. 14-15-32.....S.D. 1,750 ft.

WOODRUFF COUNTY

E. F. Thompson's No. 1 Rosser, 500 ft. N and E, SW cor. SE SE Sec. 7-5n-2w.....Set 400 ft. 10-in. surface csg.

East Texas

BOWIE COUNTY

Logan & Elliott's No. 1 Smith, 9,600 ft. S, 2,500 ft. W, NE cor. Chas. Lewis Sur......S.D. 4,505 ft.

Lanford et al's No. 1 W. W. Whybark, 200 ft. S, 200 ft. W, SW cor. J. H. Dyer Sur......S.D. 1,792 ft.

CASS COUNTY

Davis & Pigg's No. 1 Roy Bryan, SW cor. Roy Bryan 38-ac. tr., Albert H. Lattimer Sur......S.D. 2,860 ft.

C. E. Murdock's No. 1 First National Bank, Evans Watson Sur......S.D. 4,390 ft.

John C. Rogers' No. 1 I. E. Lanier, 573 ft. N, 879 ft. W, SE cor. Lanier 86 ac. in K. E. Welborn Sur......S.D. 2,280 ft.

John C. Rogers et al's No. 1 W. Q. Henderson, 3,100 ft. S, 3,100 ft. E, NW cor., Wm. Davis Sur......S.D. 960 ft.

HARRISON COUNTY

Great Eastern Oil Co.'s No. 1 Rudd, Wm. Steele Sur.....Drlg. 350 ft.

Pat Hudson et al's No. 1 Heitt, B.B.B.&C.R.R. Sur.....Location.

M. E. Nash et al's No. 1 Henderson, G. L. Bledsoe Sur...S.D. 3,485 ft.

Ryan Cons. Pet. Corp.'s No. 1 J. M. Fuhr, 1,300 ft. N of NW cor. T. J. Copelin Sur., 1,675 ft. SW at right angles to NW SE line of O'Neal Sur......Coring 4,955 ft.

Triangle Drlg. Co.'s No. 1 Platt, 1,128 ft. W, 1,995 ft. N, SE cor. F. C. Barker Sur......Location.

MARION COUNTY

Bannoch Dev. Co.'s No. 1 Miller, 725 ft. N, 1,470 ft. E, SW cor. H. Fulgram Sur. (was Gist, Claunch & Dodson).....Reaming to bottom 4,480 ft.

Geo. Hindeman et al's No. 1 F. V. Lindsey, 2,500 ft. S, most northerly N line, 3,555 ft. E most easterly W line, Alexander Albright Sur......S.D. 2,380 ft.

Purcell et al's No. 1 Coker, M. Reed Sur......S.D. 1,957 ft.

Harling & Preston's No. 1 Henderson, R. Bennington Sur. H. R. S......Drlg. 1,425 ft.

PANOLA COUNTY

Root-Skinner's No. 1 Daniel, 600 ft. N and W lines, Mrs. Gerrell 100-ac. tr., SW cor. Isabel Hanks Sur...S.D. for D.S. 740 ft.

J. L. Nelson et al's No. 1 J. Williams, 300 ft. S, 700 ft. W, NE cor. Williams' 67-ac. tr. in James Hanks Sur......S.D. 3,055 ft.

SHELBY COUNTY

E. H. Francis' No. 1 John Mims, Mary Smith Sur......S.D.; W.O. 2,840 ft.

General Minerals Co.'s No. 2 Pickering Lbr. Co., 600 ft. N, 400 ft. E, SW cor. D. S. Height Sur......Reaming to set 8-in. 3,270 ft.

Oil News' No. 1 Pickering, C. H. Patterson Sur......Drlg. 3,360 ft.

Henry Mauilding's No. 1 Frost Lbr. Co., NE cor. Frost Lbr. Co.'s 20-ac. tr., A. D. Fountain Sur......Drilled to 50 ft; S.D.

Prairie Creek Crude Co.'s No. 1 Ellington, 150 ft. N and 300 ft. W from SE cor. 42-a. tr. of J. Burleson Sur... S.D. 3,230 ft.

Ridgeway et al's No. 1 Polley, Dominguez Gonzales Sur., 3,180 ft. E of SW cor., 160 ft. N at right angles of Polley 457-ac. tr......S.D. 2,820 ft.

Sudberry et al's No. 1 Pickering Lbr. Co., 600 ft. N, 400 ft. E, SW cor. Jane Stoddard Sur......S.D. 2,375 ft.

Western World's No. 1 Foster, Billingsby-Jeremiah Bowlin Sur......S.D. 2,940 ft.

Wray & Dunbar's No. 1 C. A. Hayden, 600 ft. N and W SE cor. 152-ac. tr. in D. T. F. Yordt Sur......S.D. for wtr. 2,280 ft.

Louisiana-Arkansas Proven Areas

North Louisiana

BOSSIER—BELLEVUE AREA

Company, well, farm name, section and block—	Remarks:
H. I. Morgan's No. 2 Smith, 1,520 ft. N, 660 ft. W, SE cor., Sec. 22-19-11	Set 10-in. 604 ft.

CADDO—PINE ISLAND AREA

Shreveport Oil Corp.'s No. 1 Muslow, 900 ft. N, 100 ft. E, from C. Sec. 32-21-15	Drlg. 2,050 ft.

CADDO—RODESSA AREA

Ark.-La. P. L. Co.'s No. 1 F. E. Gloyd, 660 ft. E, 100 ft. S, NW cor. NW NE, Sec. 24-23-16	Drlg. 3,510 ft.

CADDO—BETHANY AREA

Calatex O. & G. Co.'s No. 1 Mrs. E. Augurs, 3,567 ft. N, 2,600 ft. E, SW cor., Sec. 19-16-16	Derrick.
Calatex O. & G. Co.'s No. 1 J. M. Agure, 2,000 ft. N, 800 ft. E, SW cor., Sec. 9-16-16	Testing 3,004 ft.

CADDO—BLANCHARD AREA

Nick Barbare's No. 1 Puckett, 330 ft. S, 150 ft. W, NE cor., Sec. 6-18-16	Rigging up.
Louana O. & G. Co.'s No. 1-A Hammeck, 760 ft. S and W, NE cor., Sec. 5-18-16	Set 10-in. 120 ft; fishing 1,700 ft.
Louana O. & G. Co.'s No. 1 Carrie et al, 1,320 ft. W, 660 ft. S, NE cor. SE, Sec. 32-19-16	Derrick.

MOREHOUSE PARISH

United Gas Public Service Co.'s No. 9 Sandidge, 200 ft. S of C, Sec. 27-20-4e	Rigging up.

RICHLAND PARISH

Pelican Nat. Gas Co.'s No. 2 Noe, 1,320 ft. N, 660 ft. W, SE cor. SW, Sec. 11-17-5e	Set 12-in. 166 ft; drlg. 800 ft.

SABINE PARISH—ZWOLLE

Abbott & Rankin's No. 1 Nulten, 330 ft. S and E, NW cor. SE NE, Sec. 2-7-13	W.O.S.R. 2,397 ft.
Jule Alford's No. 1 Stoker, 212 ft. N and W, SE cor. NE SW, Sec. 10-7-11	Set 6-in. 2,388 ft; drlg. 2,487 ft.
J. H. Askew's No. 3 Henderson, 400 ft. S, 150 ft. E, NW cor. SW SE, Sec. 31-8-10	Derrick.
J. H. Askew's No. 2 Henderson, 420 ft. S, 190 ft. W, NE cor. SW SE, Sec. 31-8-10	Drlg. 2,615 ft.
J. H. Askew's No. 2-E McNeely 65 ft. S, 100 ft. W, NE cor. SE NE, Sec. 14-7-11	W.O.S.R. 2,658 ft.
Askew & Ellis' No. 3-E McNeely, 230 ft. N and W, SE cor. NE, Sec. 14-7-11	Set 6-in. 2,405 ft.
Baird Bros.' No. 3 Martinez, 1,013 ft. S, 907 ft. E, NW cor. NW SW, Sec. 2-7-13	Set 6-in. 2,084 ft.
Baird, Stone & McFaddin's No. 1 Duggan, 150 ft. S and W, NE cor. SE, Sec. 14-7-11	Drlg. 2,613 ft.
C. W. Beene et al's No. 1 Cutrer, 200 ft. N and E, SW cor. NW, Sec. 12-7-11	Derrick.
Bridges & Clark's No. 4 Williams, 60 ft. N, 250 ft. W, SE cor. NE SW, Sec. 33-10-12	Set 10-in. 110 ft; drlg. 1,200 ft.
Cameron Oil Co.'s No. 1 G. Martinez, 845 ft. E, 540 ft. N, SW cor., Sec. 2-7-13	Rigging up.
Capitol-Crescent Oil Co.'s No. 1 Sabine State Bank, 990 ft. E, 338 ft. N, SW cor. NW SW, Sec. 2-7-13	Derrick.
Capitol-Crescent Oil Co.'s No. 1 Byrd, 340 ft. W, 350 ft. S, NE cor. SE NW, Sec. 1-7-11	Moving in rig.
T. B. Carpenter's No. 1 Cutrer, 330 ft. S and E, NW cor. SE, Sec. 13-7-11	Derrick pattern.
Coates Pet. Co., Inc.'s No. 1 Gray, 200 ft. S, 32 ft. E, NW cor. SE SW, Sec. 3-7-13	Set 10-in. 42 ft; drlg. 1,550 ft.
Continental Drlg. Co.'s No. 1 Leone est., 70 ft. N, 200 ft. W, SE cor., Sec. 31-8-12	Derrick.
Craig et al's No. 1 Pouder, 330 ft. N and E, SW cor. SE NW, Sec. 15-7-11	Derrick.
Edwards & Hubler's No. 1 G. Martinez, 510 ft. S, 280 ft. E, NW cor. SW SW, Sec. 2-7-13	Derrick.
J. E. Grandstaff's No. 1 Johnson, 8½ SW SW, Sec. 3-7-11	Pumping 25 bbls. 2,592 ft.
J. J. Hall's No. 4 Jacoba, 175 ft. W, 300 ft. N, SE cor. Sec. 1-7-11	Dry and abd. 2,710 ft.
V. R. Hammons et al's No. 1 Travis, 540 ft. N, 150 ft. E, SW cor. NW SE, Sec. 13-7-11	Set 10-in. 41 ft.
D. D. Holcomb's No. 2 Quayhagiew, 149 ft. N, 200 ft. E SW cor. SE SE, Sec. 11-7-11	W.O.S.R. 2,652 ft.
J. B. Hughes' No. 1 Johnson, 250 ft. S, 670 ft. E, NW cor. SW NW, Sec. 2-7-11	Set 10-in. 140 ft; drlg. 1,650 ft.
Imperial Producers Co.'s No. 1 Leone Est., 1,334 ft. S, 660 ft. E, NW cor., Sec. 32-8-12	Location.
M. M. Jones' No. 1 Raines, 300 ft. S, 150 ft. W, NE cor. NW NW, Sec. 14-7-11	S.D. 2,396 ft.
Lanier et al's No. 2 Steinhorst, 150 ft. S and W, NE cor. SE NW, Sec. 3-7-13	W.O.S.R. 2,450 ft.
Lee & Burnett's No. 1 Travis, 510 ft. S, 150 ft. E, NW cor. NE NW, Sec. 13-7-11	Testing 2,661 ft.
Lion Oil Ref. Co.'s No. 2 LaRoux, 384 ft. S and W, NE cor. SW SE, Sec. 3-7-13	Location.
Lyons & Neely's No. 8 Clanon, SE cor. SE NW, Sec. 14-7-11	Dry and abd. 2,750 ft.
Loring Oil Co.'s No. 21 Bowman-Hicks, 450 ft. S, 275 ft. E, NW cor. SW NW, Sec. 16-7-13	Drlg. 4,168 ft.
Magnolia Pet. Co.'s No. 2 Williams, 240 ft. S, 261 ft. E, NW cor. NW NE, Sec. 6-7-10	Comp. pumping 72 bbls. 2,653 ft.
Magnolia Pet. Co.'s No. 3 Williams, 150 ft. S, 200 ft. E, NW cor. NE NW, Sec. 6-7-10	Set 12½-in. 22 ft.; set 6-in. 2,405 ft.
L. M. McGuffin's No. 1 Chadick, 300 ft. N, 275 ft. E, SW cor. NE SE, Sec. 31-8-10	Drlg. 1,475 ft.
Frank Melat's No. 1 Davis, 175 ft. W, 225 ft. S, NE cor., Sec. 2-7-11	S.D. 2,572 ft.
Ben Merritt, trustee's No. 1 Chadick, SW cor. SW NE, Sec. 31-8-10	Dry and abd. 2,728 ft.
C. D. Neff, tr.'s No. 2 Snell, 400 ft. E, 330 ft. N, SW cor. SE SE, Sec. 9-7-11	Derrick pattern.
E. F. Neely's No. 3 Pouder, 200 ft. S, 190 ft. E, NW cor. NW, Sec. 15-7-11	S.D. 2,550 ft.
E. F. Neely's No. 4 Pouder, 220 ft. E, 225 ft. S, NW cor. SW SW, Sec. 15-7-11	Derrick.
Pelican Nat. Gas Co.'s No. 16 La. Long Leaf Lbr. Co., 86 ft. S, 544 ft. W, NE cor. NW NE, Sec. 10-7-11	W.O.S.R. 2,627 ft.
Pelican Nat. Gas Co.'s No. 9 Sabine Lbr. Co., 200 ft. N and E, SW cor. NE SW, Sec. 3-7-13	W.O.S.R. 2,400 ft.
Pelican Nat. Gas Co.'s No. 3 Buckley, 330 ft. N and W, SE cor. SW SW, Sec. 31-8-10	Rigging up.
Pelican Nat. Gas Co.'s No. 17 La. Long Leaf, 330 ft. S and E, NW cor. NE NW, Sec. 31-8-11	Derrick.
T. L. Phillips et al's No. 1 Haley, 330 ft. S and E, NW cor. NW SE, Sec. 6-7-12	Derrick
H. C. Pitts et al's No. 1 Trammell, 1,037 ft. S, 150 ft. E, NW cor. NE NE, Sec. 5-7-11	Location.
Ritchie Prod. Co.'s No. 1 Byrd, 503 ft. N, 399 ft. W, SE cor. NE NW, Sec. 1-7-11	W.O.S.R. 2,465 ft.
W. H. Rowe et al's No. 1 Cutrer, 330 ft. N and E, SW cor. NE, Sec. 13-7-11	Derrick.
C. T. Ruffin's No. 1 Lilly, 545 ft. S, 200 ft. W, NE cor. NW NW, Sec. 8-7-11	Drlg. 1,400 ft.
Sabine Prod. Co.'s No. 3 Sabine Lbr. Co., SW cor. NW SE, Sec. 3-7-13	Drlg. 2,381 ft.
Scully & Beach's No. 4 Lafitte, 225 ft. E, 197 ft. S, NW cor. SW NW, Sec. 13-7-11	Derrick.
Scully & Beach's No. 5 Lafitte, 413 ft. S, 190 ft. W, NE cor, SW NW, Sec. 13-7-11	Derrick.
E. M. Self's No. 2 Henderson, 335 ft. N and E, SW cor. SE SE, Sec. 31-8-10	Drlg. 1,100 ft.
Simmons et al's No. 1 Fleming, E half SE SE, Sec. 11-8-13	Derrick.
Skidmore Oil Co.'s No. 2 G. Martinez, 330 ft. S and W, NE cor. SE SE, Sec. 3-7-13	Set 6-in. 2,072 ft.
Scully & Beach's No. 3 Lafitte, 1,030 ft. S, 134 ft. E, NW cor., Sec. 13-7-11	Set 6-in. 2,390 ft.
Ben F. Smith's No. 3 Turner, Sec. 4-7-11, 1,340 ft. E, 200 ft. S, NW cor., Sec. 4-7-11	Drlg. 1,570 ft.
F. E. Stancil's No. 1 Pouder, 273 ft. S, 397 ft. E, NW cor. NE SE, Sec. 10-7-11	S.D. 2,593 ft.
State Prod. Co.'s No. 1 Keazele, 150 ft. N and W, SE cor. NW SW, Sec. 2-7-13	W.O.S.R. 2,427 ft.
State Prod. Co.'s No. 1 Lites, 150 ft. S and W, NE cor. SE SW, Sec. 28-8-11	Derrick.
State Prod. Co.'s No. 1 Sabine Lbr. Co., 365 ft. N, 100 ft. W SE cor. NW SW Sec. 3-7-13	S.D. 2,427 ft.
H. H. Stout et al's No. 1 Byrd, 150 ft. N and E, SW cor. NW NW, Sec. 1-7-11	S.D. for csg. 2,332 ft.
Turnbow & Lacey's No. 1 McNeely, 550 ft. E, 230 ft. N, SW cor. NE NE, Sec. 14-7-11	Set 10-in. 21 ft.; drlg. 2,015 ft.
C. H. Tuttle's No. 3 Byrd, 700 ft. E, 510 ft. S, NW cor., Sec. 7-7-10	W.O.S.R. 2,727 ft.
J. H. Watt et al's No. 1 Pouder, 200 ft. S, 135 ft. W, NE cor. NW NE, Sec. 15-7-11	Derrick.
B. R. White et al's No. 1 Stille, 620 ft. W, 205 ft. N, SE cor. NE SW, Sec. 35-8-13	Rigging up.
J. P. White's No. 1 Nulton, 330 ft. N and E, SW cor. NE NW, Sec. 1-7-13	S.D. 2,455 ft
George Woulf's No. 1 Nulton, 330 ft. S, 330 ft. E, NW cor. SW NE, Sec. 2-7-13	Comp. pumping 30 bbls. 2,430 ft.

UNION PARISH

G. H. McHenry, tr.'s No. 1 Potts, 2,044 ft. N, 394 ft. W, SE cor. NE, Sec. 15-21-3e	Derrick pattern
Southern Carbon Co.'s No. 62 fee, 1,920 ft. S and W, NE cor. NW, Sec. 30-20-4e	Location

Arkansas

UNION COUNTY—URBANA

Marine Oil Co.'s No. 1 Winn est., 330 ft. S and E, NE cor. 8½ NW, Sec. 11-18-13	T.A. 3,586 ft
Marine Oil Co.'s No. 2-E Thompson, 330 ft. N, 330 ft. E, SW cor. NE NE, Sec. 10-18-13	Location
Wilson & Chapman's No. 1-B Hadley, Sec. 3-18-13, 330 ft. S and W, NE cor. SE NW	T.A. 3,545 ft.
Wilson & Chapman's No. 2 Emily King, Sec. 3-18-13, 150 ft. S, 150 ft. E, NW cor. NE NE	S.D. 1,780 ft.

East Texas

PANOLA COUNTY

Daisy O. & G. Co.'s No. 1 Rucks, John Palmer Sur.	S.D. 3,359 ft.

Mississippi

RANKIN COUNTY

James Alexander's No. 2 Hurst, 826 ft. E, 660 ft. N, SW cor. NW NW, Sec. 7-5n-3e.....Derrick.
Love Pet. Co.'s No. 1 Spann, 1,120 ft. W, 200 ft. S, NE cor., Sec. 13-5n-1e.....Drlg. 300 ft.
J. A. Matson et al's No. 1 Warner, 1,100 ft. S, 200 ft. W, NE cor. W½ SE, Sec. 14-5n-1e.....Waiting on csg. 2,477 ft.

Wildcat Operations in Mississippi

AMITE COUNTY

Company, well, farm name, section and block—	Remarks:
Magnolia State O. & G. Co.'s No. 1 Anderson, C NE NW, Sec. 14-3n-3e	Drlg. 325 ft.

CLARKE COUNTY

F. X. Gowans et al's No. 1 Elfring, SE NE, Sec. 13-1n-14e.	S.D. 104 ft.

HINDS COUNTY

Love & Lancaster's No. 1 Elton Plantation, C SE, Sec. 17-4n-1e	Drlg. 3,300 ft.
National Gas Co.of Miss.' No. 1 M. C. Halder, 160 ft. E, 660 ft. N, SW cor., Sec. 16-4n-1e	Drlg. 100 ft.

JASPER COUNTY

B. B. Jones' No. 1 Bank of Philadelphia, 660 ft. N and W, SE cor., Sec. 35-3n-12e	Drlg. 75 ft.

LAMAR COUNTY

Chas. W. Gorr et al's No. 1 Jordan, NW C of SW, Sec. 1-2n-15w	Derrick.
Stauffer & Koori's No. 1 Bond, SE NE, Sec. 18-2n-14w.	Plugged back to 3,006 ft.

LOWNDES COUNTY

Lowndes County Oil & Dev. Co.'s No. 1 Carr est., Sec. 34-17-16e, 1,320 ft. E, 330 ft. S, NW cor. Sec.	S.D. 2,200 ft.

MONROE COUNTY

P. J. McAlpine's No. 1 Rye, Sec. 22-15s-17w	S.D. 1,777 ft.

NEWTON COUNTY

Bob Dalton's No. 1 Majure, 400 ft. N, 300 ft. E, SW cor. SE, Sec. 25-4n-11e	S.D. 1,754 ft.

RANKIN COUNTY

Home Oil Prod. Corp.'s No. 1 So. Jackson Land Co., 85 ft. S, 130 ft. W, NE cor. NW NW, Sec. 23-5n-1e	Testing; T.D. 2,491 ft.
Love Pet. Co.'s No. 2 Int. Lbr. Co., 450 ft. S and E, NW cor., Sec. 28-4n-2e	T.A. 2,657 ft.
Majestic O. & G. Co.'s No. 1 Elton Lbr. Co., Sec. 10-4n-3e.	Derrick.

SCOTT COUNTY

M. U. Culley et al's No. 1 Owens, Sec. 2-8-9	S.D. 750 ft.

Wildcat Operations in Alabama

LAMAR COUNTY
(Cable tools)

Company, well, farm name, section and block—	Remarks:
DeSoto O. & G. Corp.'s No. 1 Gardner, NW NW, Sec. 33-15s-16w	S.D. 3,250 ft.

MOBILE COUNTY

J. C. Prine et al's No. 1 M.&O.R.R., Sec. 33-3n-4w	Drlg. 3,527 ft.

WASHINGTON COUNTY

South Alabama O. & G. Co.'s No. 1 Wilson, Sec. 26-7n-1w.	Drlg. 2,115 ft.

Gulf Coast Fields and Wildcats

(Continued from Page 57)

Texas Gulf Prod. Co.'s No. 12-H Kirby, Henry Griffith League, 429 ft. W of No. 8-H and 65 ft. N of S line.....Derrick.
Texas Gulf Prod. Co.'s No. 2 T. H. McLean, Henry Griffith League, 711 ft. from E line midway between C. Barber and McLean tracts on separating line.....Drlg. shale and lime 3,988 ft.
Texas Gulf Prod. Co.'s No. 3 Tarbutton, Henry Griffith League, 746 ft. from E line in C of tract.....Rock 710 ft; losing returns.
Texas Gulf Prod. Co.'s No. 2 O. K. Winfrey, W. D. Smith Sur., 295 ft. N of SW cor. of A. E. Barber lease and 100 ft. W of E line of Winfrey lease.....Drlg. salt 4,739 ft.
Yount Lee Oil Co.'s No. 4-A Zadie Fisher, Wm. Bloodgood Sur., 301 ft. from W line and 96 ft. from S line of tract.....Drlg. hard sand 6,454 ft.

LOST LAKE—CHAMBERS COUNTY

Pure Oil Co.'s No. 16 Mayes, E. H. R. Wallis Sur., 1,825 ft. N and 1,429 ft. E of No. 1 Lost River.....Drlg. hard sticky shale and lime 2,592 ft.

ORCHARD—FORT BEND COUNTY

Gulf Prod. Co.'s No. 34 Moore, Mark Smith Sur.....Tested S.W. 3,335 ft; pulling screen to deepen.

RABBS RIDGE—FORT BEND COUNTY

Gulf Prod. Co.'s No. 1 Edwards & Riggins, Samuel Kennedy Sur., 466.5 ft. E and 466.5 ft. N of SW cor. of SE 20-acre unit.....Spudded.
Gulf Prod. Co.'s No. 2 Gubbels, Samuel Kennedy Sur. (location to come).....Sand and shale showing oil 5,-189 ft.
Humble O. & R. Co. and Gulf Prod. Co.'s No. 5 Meyers, J. Rabb Sur., 1,000 ft. W and 250 ft. N of SE cor. of Meyers 188-acre tract.....Derrick.
Humble Oil & Ref. Co. and Gulf Prod. Co.'s No. 4 T. R. Booth, Samuel Kennedy Sur. (location to come).....Drlg. hard lime 3,109 ft.
Humble Oil & Ref. Co. and Gulf Prod. Co.'s No. 6-A F. I. Booth, Samuel Kennedy Sur.....Drlg. sand and shale 4,985 ft.
Humble Oil & Ref. Co. and Gulf Prod. Co.'s No. 7-A F. I. Booth, Samuel Kennedy Sur.....Derrick.
Humble Oil & Ref. Co. and Gulf Prod. Co.'s No. 3 Davis, Robt. Peebles Sur., 2,935 ft. from W line and 350 ft. from N line.....T.D. 6,281 ft; pumping mud to kill gas pressure.
Humble Oil & Ref. Co. and Gulf Prod. Co.'s No. 5 George, John Rabb Sur., 1,000 ft. E of No. 4.....Comp. flowing 55 bbls. per hr., ⅝-in. choke; 600 lbs. on tubing and 175 lbs. on csg.
Humble Oil & Ref. Co. and Gulf Prod. Co.'s No. 8-A George, J. Rabb Sur., 1,000 ft. from W line and 350 ft. from S line of tract.....Derrick.
Humble Oil & Ref. Co. and Gulf Prod. Co.'s No. 5 Lockwood, John Rabb Sur., 300 ft. from N line and 1,000 ft. from W line of 380-ac. tract.....Drlg. sandy shale 4,963 ft.
Humble Oil & Ref. Co. and Gulf Prod. Co.'s No. 6 Lockwood, 4,000 ft. E and 323 ft. N of SW cor.....Derrick.
Humble Oil & Ref. Co. and Gulf Prod. Co.'s No. 9-A Lockwood & Sharp, J. Rabb Sur., due S offset Gulf and Humble's No. 4 Meyers.....Drlg. sand and shale 3,489 ft.
Humble Oil & Ref. Co. and Gulf Prod. Co.'s No. 10-A Lockwood & Sharp, J. Rabb Sur.....Drlg. hard shale 5,276 ft.
Humble Oil & Ref. Co. and Gulf Prod. Co.'s No. 5-B Lockwood & Sharp, John Rabb Sur., 300 ft. W of No. 4.....Sandy shale 4,952 ft; cmtd. 7-in. csg.
Humble Oil & Ref. Co. and Gulf Prod. Co.'s No. 6-B Lockwood & Sharp, John Rabb Sur., 300 ft. E of No. 4.....Sandy shale showing oil 4,983 ft; cmtd. 7-in. csg.
Humble O. & R. Co. and Gulf Prod. Co.'s No. 7-B Lockwood & Sharp, J. Rabb Sur.....Location.
Humble Oil & Ref. Co. and Gulf Prod. Co.'s No. 1 R. A. and O. H. Wolters, Robt. Peebles Sur., 325 ft. S and 500 ft. W of NE cor. of 1,000-ac. tract.....Derrick.
Humble Oil & Ref. Co.'s No. 1 Gubbels, Samuel Kennedy Sur., 750 ft. N and 775 ft. W of SE cor. of Mrs. Mary Gubbels 90.6 acres.....Rig.
Naylor et al's No. 1 Whitmore, Samuel Kenedy Sur., 467 ft. N of S line in C E and W of Lot 7 (20 acres).....Rig.
The Texas Company's No. 3 Wolters, Samuel Kennedy Sur., 750 ft. N of No. 2 and 300 ft. W of E line.....Drlg. sand and boulders 1,058 ft.

HIGH ISLAND—GALVESTON COUNTY

Yount Lee Oil Co.'s No. 31 Cade, N. Fitzsimmons Sur., midway between and in line with Nos. 21 and 29 Cade.....Drlg. sand and shale 5,535 ft.
Yount Lee Oil Co.'s No. 2 Broussard & Orme, Martin Duman Sur., 300 ft. SE of No. 1.....Sticky shale 6,200 ft.
Yount Lee Oil Co.'s No. 32 Cade, N. Fitzsimmons Sur., 600 ft. due S of No. 30.....Drlg. hard sand 4,420 ft.
Yount Lee Oil Co.'s No. 1 Mathais fee, 150 ft. from S line and 192 ft. from E line of 23.44-acre tract in Sarah Reeves Subd., Martin Dunman Sur.....Rig.
Yount Lee Oil Co.'s No. 13 Smith, Martin Dunman Sur., 600 ft. W of No. 12 in line with Nos. 11 and 12.....Drlg. hard sand 2,050 ft.

MANVEL—BRAZORIA COUNTY

The Texas Company's No. 2 Ewing, 1,220 ft. southwesterly and 300 ft. northwesterly at right angles out of E cor. of Blk. E of Suburban Gardens Subd., Harvey N. Little Sur.....Sand showing oil 3,992-99 ft.; cmtd. 9⅝-in. csg.

BATSON—HARDIN COUNTY

W. C. Christian's No. 1 Buchanan, Josephine Milholme Sur., 800 ft. from W line and 110 ft. from S line of 4.15-acre tract.....Drlg. 150 ft.

SARATOGA—HARDIN COUNTY

Rio Bravo Oil Co.'s No. 401-B "B".....Sand 175-94 ft; comp. pumping 1 bbl. net oil daily.
Rio Bravo Oil Co.'s No. 90 Jordit.....Drlg. sand and shale 202 ft.
Rio Bravo Oil Co.'s No. 402-B "B".....Spudded.

SOUR LAKE—HARDIN COUNTY

Houston Prod. Co.'s No. 1 Merchant, Stephen Jackson Sur., 90 ft. from E line and 1,226 ft. from S line of lease.....Cap rock 4,051 ft.; standing.
Jackson Mineral Oil Co.'s No. 1 Lula Hebert, 50 ft. from N line and 72 ft. from E line of 2-acre tract, Lot 3, Stephen Jackson Sur.....Cap rock 2,885-92 ft.; standing.
M. M. Miller's No. 1 Libbie Oil Co., Stephen Jackson Sur., 1,380 ft. NW of Houston Prod. Co.'s No. 1 Merchant.....Derrick.

HUMBLE—HARRIS COUNTY

J. D. Clay's No. 4 Bender, Robt. Dunman Sur., 215 ft. N of No. 3.....Sandy shale 1,140 ft.
Sun Oil Co.'s No. 28 Bender, W. B. Adams Sur., 350 ft. W of No. 27.....Rock 4,520 ft.
Sun Oil Co.'s No. 59 River, R. Dunman Sur., 74 ft. from E line and 1,441 ft. from S line of block.....Standing 370 ft.
Sun Oil Co.'s No. 63 River, Robt. Dunman, 100 ft. E of J. D. Clay's No. 4 Bender.....Set 43 ft. of 4½-in. screen 1,113 ft.; comp. flowing 100 bbls. P. L. oil.
Sun Oil Co.'s No. 64 River, Robert Dunman Sur., 1,972 ft. N of S line and 284 ft. E of W line of River lease..Spudded.
J. O. Williams' No. 1 Stockdick, James Strong Sur., 100 ft. out of SE cor. of 22-acre lease.....S.D. 300 ft.
E. M. Wilson's No. 1 Wheeler & Pickens, Block 20, 40 ft. N of S line and 75 ft. E of W line of Blk. 20, J. B. Stevenson Sur.....Drlg. 1,075 ft.

MYKAWA—HARRIS COUNTY

Crown-Framer Oil Co.'s No. 3 Minnetex, 100 ft. from N line and 100 ft. from E line of W half of Block 251, Wm. Lovett Sur.....Sandy shale showing oil 4,845 ft; drlg. plug.
Hamill & Smith's No. 1 Ward, 50 ft. out of SE cor. of Ward 10-ac. tract, Blk. 136, Wm. Lovett Sur.....Dry and abd. 5,370 ft.

PIERCE JUNCTION—HARRIS COUNTY

Rio Bravo Oil Co.'s No. 25-A Settegast, 635 ft. W and 525 ft. N of SE cor. "A" lease, Jas. Kopman Sur. No. 44.....Drlg. shale 4,390 ft.
Rio Bravo Oil Co.'s No. 26-A Settegast, J. Kopman Sur., 1,210 ft. from N line and 750 ft. from E line of "A" lease.....Rig.
Rock Drlg. Co.'s No. 1 Hooks, Jas. Hamilton Sur. No. 52, 160 ft. S and 60 ft. E of Humble's No. 1 Hooks...Drlg. shale 4,392 ft.

FANNETT—JEFFERSON COUNTY

Gulf Prod. Co.'s No. 6 Burrell, Wm. Smith Sur., 1,610 ft. N and 300 ft. E of SW cor. of 232-acre tract....Tested S.W. 4,082 ft.; pulling screen to deepen.
John R. Turnbull's No. 1 Junker, Wm. Smith Sur., 125 ft. N and 100 ft. E of Gulf Prod. Co.'s No. 1 Junker in 260-acre tract.....Rig.

ESPERSON—LIBERTY COUNTY

Cranfill-Reynolds Co.'s No. 7 Davis (D.D.), David L. Kokernut Sur.....Rig up to deepen 6,302 ft.
Cranfill & Reynolds' No. 5 Esperson (W.O.), M. Duncan Sur., 100 ft. N line and 300 ft. E line.....D.S. stuck 6,844 ft.
Cranfill-Reynolds Co.'s No. 9 Moore's Bluff, M. Duncan Sur., 500 ft. S of N line of Moore's Bluff tract in line with No. 6 Davis and No. 6 Moore's Bluff.....Location.
Cranfill-Reynolds Co.'s No. 10 Moore's Bluff, M. Duncan Sur., 1,500 ft. from E line and 2,100 ft. from N line of 632-ac. tract.....Drlg. shale 4,300 ft.

HULL—LIBERTY COUNTY

Aberoil Co., Inc.'s No. 1 fee, Jesse DeVore Sur., 700 ft. from E line and 64 ft. from N line.....Shut down 42 ft.
Carpenter & Parr's No. 1 Antilley, Jesse DeVore Sur., 100 ft. out of NE cor. of Antilley 20-acre tract.....Set 81 ft. of 4½-in. screen 2,967 ft.; comp. flowing 25 bbls. P.L. oil.
Carpenter & Parr's No. 2 Antilley, Jesse DeVore Sur., 821 ft. W and 250 ft. S of NE cor. of 20-acre lease..Rigging.
D. & L. Prod. Co.'s No. 1 Pevito (W.O.), Jesse DeVore Sur., 34½ ft. from E line and 30 ft. from N line of 5-acre strip.....T.D. 4,687 ft; W.O.
Eclipse Oil Co.'s No. 1 Knox-Nelson-Layton, Jesse DeVore Sur., 30 ft. from N line and midway E and W of ¼-acre tract.....Derrick.
Empire G. & F. Co.'s No. 34 Barngrover, Jesse DeVore Sur., 75 ft. out of SW cor. of lease.....Pulling screen 4,393 ft.
W. B. Flynn's No. 1 Ray (W.O.), Jesse DeVore Sur.....Drlg. sandy shale 2,076 ft.
Gulf Coast Dev. Co.'s No. 2 Finley, Jesse Devore Sur., 135 ft. W of No. 1 and 51 ft. S of N line of lease....Rig.
Gulf Prod. Co.'s No. 30 Phoenix (W.O.), Jesse DeVore Sur.....Pulling screen 3,142 ft.
Fondren & Snowden's No. 1 Humble fee, Jesse DeVore Sur., 250 ft. from E line and 50 ft. from S line of Humble Oil & Ref. Co.'s Hooks-Carr fee 6 acres.....Rig up to pump 1,957 ft.
Hannah Oil Co.'s No. 1 Hannah, Jesse DeVore Sur., 100 ft. W of The Texas Co.'s No. 1 Hannah.....No report.
Lynd & Rowe's No. 1 Noble & Lynd, Jesse DeVore Sur., 137 ft. out of SE cor. 5-acre tract.....Rigging.
Republic Prod. Co.'s No. 19 Dolbear (W.O.), Jesse DeVore Sur.....Cmtd. csg. 3,005 ft.
Republic Prod. Co.'s No. 141 Dolbear (W.O.), Jesse DeVore Sur.....Cmtd. csg. 3,301 ft.

NORTH DAYTON—LIBERTY COUNTY

V. H. Borsodi's No. 2 Gulf fee (W.O.), H.&T.C. Sur., 600 ft. from N line and 82 ft. from E line of tract..T.A. 5,088 ft.
Ferguson & Head's No. 1 Quintette, H.&T.C. Sur., 48 ft. E of W line and 674 ft. N of S line of 10-acre tract.....No report.

SOUTH LIBERTY—LIBERTY COUNTY

Mecom Oil Co.'s No. 1 Barrett, M. G. White Sur., 365 ft. from S line and 155 ft. from E line of lease ..... No report.

CONROE—MONTGOMERY COUNTY

Gulf Coast Drlg. & Prod. Co.'s No. 1 Keystone Mills, 300 ft. out of NE cor. of A. S. James (T.&N.O. No. 4) Sur. ..... Set 17¾ ft. of 5-in. screen 5,009 ft.; comp. flowing 334 bbls. in 24 hrs., ¼ and 7/16-in. chokes, 1,980 lbs. on tubing; estimated 25,000,000 ft. of gas.

W. B. Hamilton et al's No. 1 Moorehead, J. McHorse Sur., 466 ft. from S line and 466 ft. from W line of Hill & Hill Moorehead 40-acre tract ..... Sand and shale showing oil 5,075 ft; cmtd. 7-in. csg. 5,025 ft.

Hooper-Rutherford Oil Co.'s No. 2 Hooper, L.&G.N. Sur., Abst. 649, 708 ft. S of No. 1 in center of tract E and W ..... Drlg. shale 3,284 ft.

Hooper-Rutherford Oil Co.'s No. 3 Hooper, L.&G.N. Sur., Abst. 649, 782 ft. S of No. 2 in center of tract E and W ..... Location.

Houston Oil Co. and Heep Oil Co.'s No. 1 Dobbins, Ransom House Sur., 466 ft. east of W line in center north and south of 100-ac. tract ..... Waiting on orders 5,050 ft.

Humble Oil & Ref. Co.'s No. 2 Dobbins, Ransom House Sur., 1,400 ft. northeasterly along SE line of lease from SW cor. and 466 ft. northwesterly at right angles ..... Sand and shale showing oil 5,103 ft.; cmtd. 7-in. csg.

Humble O. & R. Co.'s No. 3 Dobbins, Ransom House, 700 ft. S from NW cor. lease and 460 ft. easterly at right angles ..... Location.

Humble Oil & Ref. Co.'s No. 1 Hirsch, D. McIntyre Sur., 450 ft. E of W line in C N and S of 40-acre tract ... Derrick.

Humble Oil & Ref. Co.'s No. 1 Madeley, Ransom House Sur., 466 ft. northwesterly at right angles from S line of tract and 518 ft. easterly from NW cor. of Dobbins 329.6 acres ..... Comp. flowing 55 bbls. per hr., ¼-in. choke, 5,110 ft.

Humble Oil & Ref. Co.'s No. 2 Madeley, Ransom House Sur., 466 ft. southwesterly along southernmost SE line from SE cor. of tract and 466 ft. northwesterly at right angles ..... Derrick.

Humble Oil & Ref. Co.'s No. 3 Madeley, 650 ft. E and 650 ft. S of SW cor. of M. W. Real Sur., in Ransom House Sur. ..... Rigging up.

Humble O. & R. Co.'s No. 1 J. W. McDonald, John Davis Sur., 150 ft. S of N line of 56.55-acre tract, and direct offset James Papadakis' No. 1 McDonald.. Derrick.

Humble Oil & Ref. Co.'s No. 1 South Texas Dev. Co. (D.D.), 468 ft. westerly along N line of Theo. Slade Sur. from SW cor. A. McCown Sur., thence 750 ft. southerly at right angles ..... Drlg. shale 5,017 ft.

Humble Oil & Ref. Co.'s No. 13 South Texas Dev. Co., 466 ft. S and 466 ft. W of SE cor. of A. M. Folks Sur. ..... T.D. 5,080 ft; plugged to 5,080 ft; set screen; washing.

Humble Oil & Ref. Co.'s No. 14 South Texas Dev. Co., 1,100 ft. N along NE line of T. C. Howell Sur. and thence 466 ft. westward at right angles ..... Sand showing oil 5,116 ft; cmtd. 7-in. csg.

Humble Oil & Ref. Co.'s No. 15 South Texas Dev. Co., 1,850 ft. northward along E line of Theo. Slade Sur. from SE cor. and thence 600 ft. westward at right angles in Lot 2 ..... Comp. flowing 100 bbls. per hr., ½-in. choke, 675 lbs. on tubing and 800 lbs. on csg; T.D. 5,-152 ft.

Humble Oil & Ref. Co.'s No. 16 South Texas Dev. Co., Theo. Slade Sur., 657 ft. S of No. 10 and 677 ft. from E line of survey ..... Sand showing oil 5,134 ft; cmtd. 7-in. csg.

Humble Oil & Ref. Co.'s No. 17 South Texas Dev. Co., 466 ft. W of E line of Gulf Coast Drlg. & Dev. Co.'s "B" lease and 297 ft. S of N line of Theo. Slade Sur.. Drlg. shale 5,165 ft.

Humble Oil & Ref. Co.'s No. 18 South Texas Dev. Co., 495 ft. E and 165 ft. N of NE cor. of Blk. 42, Alex McCown Sur. ..... T.D. 5,186 ft; plugged to 4,900 ft; tested S.W.; abd.

Humble Oil & Ref. Co.'s No. 19 South Texas Dev. Co., 30 ft. N and 482 ft. W of SE cor. of T. C. Howell Sur.. Drlg. sand 1,040 ft.

Humble Oil & Ref. Co.'s No. 20 South Texas Dev. Co., 765 ft. S and 671 ft. W of NE cor. of Theo. Slade Sur. ..... Drlg. shale and lime 3,492 ft.

Humble Oil & Ref. Co.'s No. 21 South Texas Dev. Co., T. C. Howell Sur., 933 ft. NE of No. 8 and 709.8 ft. NW of survey line ..... Derrick.

Humble Oil & Ref. Co.'s No. 22 South Texas Dev. Co., Theo Slade Sur., 333 ft. SW of SE cor. of Alex McCown Sur., thence 500 ft. S at right angles ..... Derrick.

Humble Oil & Ref. Co.'s No. 23 South Texas Dev. Co., Theo. Slade Sur., 660 ft. N of No. 9 and 350 ft. E of E line of Gulf Coast Drlg. & Dev. Co.'s 60-acre tract.. Derrick.

Humble Oil & Ref. Co.'s No. 24 South Texas Dev. Co., Theo. Slade Sur., 1,520 ft. W and 765 ft. S of NE cor. of survey ..... Derrick.

Humble O. & R. Co.'s No. 25 South Texas Dev. Co., Theo. Slade Sur., 849 ft. S of No. 21 ..... Location.

Humble Oil & Ref. Co.'s No. 26 South Texas Dev. Co., 1,200 ft. S of SE cor. of Gulf Coast D. & D. Co.'s "B" lease ..... Derrick.

Humble Oil & Ref. Co.'s No. 1-A Alexander, NE cor. of J. McHorse Sur. ..... Drlg. shale and lime 2,779 ft.

Humble Oil & Ref. Co.'s No. 1-B Alexander, John McHorse Sur., 599 ft. S and 363 ft. E of NW cor. of Alexander "B" lease ..... Derrick.

Humble Oil & Ref. Co.'s No. 1-C Alexander, John McHorse Sur., 577 ft. from E line of survey in C N and S of 20-acre tract ..... Derrick.

Humble O. & R. Co.'s No. 1-D Alexander, John McHorse Sur., 599 ft. S of N line of survey and midway E and W lines of 20-acre "D" lease ..... Location.

Humble O. & R. Co.'s No. 1-E Alexander, John McHorse Sur., 577 ft. E of W line of Sur., and midway N and S line of 50-acre "E" lease ..... Location.

Humble Oil & Ref. Co.'s No. 5 Cartwright, 694 ft. W and 370 ft. N of NE cor. of J. D. Watson Sur. in John Davis Sur. ..... Comp. flowing 70 bbls. hourly, ¼-in. choke, 5,059 ft.

Humble Oil & Ref. Co.'s No. 6-A Cartwright, John Davis Sur., 671 ft. from W line and 376 ft. from S line of lease ..... Drlg. shale 4,570 ft.

Humble Oil & Ref. Co.'s No. 7-A Cartwright, 350 ft. N of S line, due N offset Violet & Griffith's No. 1 Hooper ..... Rig.

Humble Oil & Ref. Co.'s No. 2 Plaetflin, W. N. Real Sur. 671 ft. from W line and 326 ft. from N line of 110-acre tract ..... Drlg. shale 4,970 ft.

Moore & Bruton's No. 2 Hooper, L.&G.N. Sur., Abst. 650, 466 ft. N of S line in C of tract E and W ..... Rig.

Navarro Oil Co.'s No. 1 Rhoden, Wilson Strickland Sur., 470 ft. from S line and 430 ft. from E line of 16-acre tract ..... Drlg. sand and shale 1,423 ft.

James Papadakis' No. 1 Stella McDonald, John Davis Sur., 241½ ft. from E line, 202.8 ft. from S line of 5-acre tract ..... Drlg. sand and shale 3,909 ft.

Albert Plummer's No. 1 South Texas Dev. Co., E half of Blk. 43, Alex McCown Sur. ..... Sand showing oil 5,190 ft; cmtd. 7-in. csg. 5,140 ft.

Rowe & Flowers' No. 1 Alexander, 330 ft. out of SE cor. Lot 20 in the NW A. McCown Sur. ..... T.D. 5,254 ft; abd.

Showers & Moncrief's No. 1 R. R. Dunn, M. W. Real Sur., 100 ft. S of C of N 20 acres of Moncrief 30 acres ..... Drlg. sand and shale 3,610 ft.

Southland Oil Co.'s No. 1 Cummings, Wilson Strickland Sur., 466 ft. out of NE cor. of 104-acre tract ..... Drlg. sticky shale 4,032 ft.

Standard Oil Co. of Kansas' No. 1 Alexander, John McHorse Sur., 330 ft. from N line and 363 ft. from W line of tract ..... Drlg. sticky shale 930 ft.

G. W. Strake's No. 1 Lewis, Chas. Stewart Sur., 1,400 ft. E of W line and 2,200 ft. N of S line ..... Drlg. sand and shale 1,350 ft.

The Texas Company's No. 1 Moody, 1,400 ft. easterly and 466 ft. southerly out of NW cor. of Moody 494-acre lease, Ranson House Sur. ..... Drlg. shale and boulders 4,730 ft.

Violet & Griffith's No. 1 Mrs. Fannie Hooper, M. DeMoss Sur., 350 ft. S of N line of survey in C E and W .... Cmtd. 10-in. csg. 940 ft.

Violet & Griffith's No. 6 Mrs. Fannie Hooper, M. DeMoss Sur., C of survey E and W, due offset Alpha's No. 1 Dunn ..... Derrick.

PORT NECHES—ORANGE COUNTY

The Texas Company's No. 2 Polk-Kuhn-Glass, 350 ft. E and 100 ft. S of SW cor. of Marshall Beauchamp Sur. ..... Set 21 ft. of 7-in. (O.D.) screen 3,483 ft; comp. flowing 145 bbls. oil, 540 lbs. pressure.

REFUGIO—REFUGIO COUNTY

Hewitt & Dougherty's No. 1 M. F. Lambert, Wm. Hews and L. Brown Sur., 4,350 ft. NE along NW line from SW cor. of United Prod. Corp.'s M. F. Lambert lease and thence 990 ft. SE at right angles ..... Standing 6,518 ft.

SOUTH LOUISIANA FIELDS

JENNINGS—ACADIA PARISH

Olympic Oil Co.'s No. 1 Luckett, 1,150 ft. S and 75 ft. W of NE cor. of Sec. 42-9s-2w ..... Rig.

Yount Lee Oil Co.'s No. 11 Housierre-Latriello, 1,010 ft. N and 5,050 ft. S of SW cor. of Sec. 47-9s-2w ..... Drlg. 5,825 ft.

SORRENTO—ASCENSION PARISH

Union Sulphur Co.'s No. 22 United Land Co., 5,760 ft. N and 1,360 ft. W of SE cor., Sec. 15-10s-4e..... No report.

IOWA—CALCASIEU AND JEFF DAVIS PARISHES

Shell Pet. Corp.'s No. 2 Fontenot, 225 ft. E and 325 ft. N of SW cor. of Sec. 7-9s-6w ..... Drlg. sandy shale and lime 6,-732 ft.

EDGERLY—CALCASIEU PARISH

The Texas Company's No. 1 Miller Estate, 150 ft. E and 150 ft. S of NW cor. of NE of Sec. 27-9s-11w ..... Hard blue shale 5,282 ft.

LOCKPORT—CALCASIEU PARISH

Lockport Oil Co.'s No. 1 Phoenix ..... D.S. stuck 1,200 ft.; standing.

Magnolia Pet. Co.'s No. 6-A Farquahar, NW cor. of NE SE of Sec. 8-10s-9w ..... Rigging.

SULPHUR—CALCASIEU PARISH

Union Sulphur Co.'s No. 770 fee, 292 ft. S, 1,248 ft. W of center, Sec. 29-9s-10w ..... Sand showing oil 4,669-79 ft.

Union Sulphur Co.'s No. 772 fee, 146 ft. S, 882 ft. W of center, Sec. 29-9s-10w ..... Salt 3,968-5,009 ft.; plugged to 3,849 ft; sidetracked to sand 3,-806 ft; set 22 ft. of 3½-in. screen; swabbing.

Union Sulphur Co.'s No. 774 fee, 226 ft. W, 114 ft. S of center of Sec. 28-9s-10w..... Sand showing oil 3,347-56 ft.; cmtd. 9¼-in. csg. 3,336 ft.

VINTON—CALCASIEU PARISH

Marrs McLean's No. 14 Gray, Sec. 33-10s-12w, 38 ft. W and 30 ft. S of No. 4 ..... Heaving shale 3,056 ft; cut 6-in. liner 1,758 ft; set 38 ft. of 6-in. screen 1,811 ft; bailing.

Vinton Pet. Co.'s No. 5 Matilda Gray (D.D.), 456 ft. W, 382 ft. N, SE cor. SW NE, Sec. 33-10s-12w..... Drlg. shale 3,905 ft.

Wilson-Broach's No. 2 Wilson (W.O.), 280 ft. N and 126 ft. E of SW cor. SE NE of Sec. 33-10s-12w ..... Set 18 ft. of 3-in. screen 3,205 ft; flowing.

GUEYDAN—VERMILLION PARISH

Pure Oil Co.'s No. 3 Alliance Trust Co., 699 ft. from N line and 1,460 ft. from W line of Sec. 34-11s-1w ..... Drlg. sand and shale 3,062 ft.

HACKBERRY—CAMERON PARISH

Wilfred Lahaye's No. 1 Olevia, Sec. 36-12s-10w, in 2-acre tract ..... Spudded and shut down.

Lackawanna Oil Co.'s No. 1 Ellender, 320 ft. S and 150 ft. E of NW cor. of SE SE of Sec. 21-12s-10w ..... Derrick.

J. G. Sutton's No. 9 Irwin, 1,520 ft. N and 1,045 ft. W of SE cor. of Sec. 13-12s-10w ..... Shale and lime 3,045 ft.

Union Sulphur Co.'s No. 4 Gulf Land-Humble lease, 710 ft. N and 830 ft. W of SE cor. of Sec. 11-12s-10w ... Rig.

Union Sulphur Co.'s No. 2 Gulf Land-Pure lease, 1,958 ft. N and 200 ft. W of SE cor. of Sec. 11-12s-10w ... Drlg. 4,855 ft.

Yount Lee Oil Co.'s No. 11 School land, 2,810 ft. W and 1,608 ft. N, SE cor., Sec. 15-12s-10w ..... T.D. 5,724 ft; sidetracking 5,502 ft.

CHOCTAW—IBERVILLE PARISH

Standard Oil Co.'s No. 3 Myrtle Grove, Sec. 52-9s-11e, 400 ft. S and 50 ft. W of No. 1 ..... Set 1 joint of 4½-in. screen 3,-051 ft; comp. flowing 300 bbls. P.L. oil, ½-in. choke.

WHITE CASTLE—IBERVILLE PARISH

Shell Pet. Corp.'s No. 6 Wilbert, Sec. 9-11s-12e, 200 ft. out from No. 5 ..... Coring hard sandy lime 4,617 ft.

CAMERON MEADOWS—CAMERON PARISH

Magnolia Pet. Co.'s No. 3 Cameron Meadows, 3,620 ft. S and 1,900 ft. W of NE cor. of Sec. 21-14s-13w.... Location.

LEESVILLE—LA FOURCHE PARISH

The Texas Company's No. 5 L.L.&E., 3,888 ft. S and 105 ft. E of NW cor. of Sec. 36-21s-22e ..... Salt 4,107-4,177 ft.; plugged to oil sand 4,027 ft.; cleaning hole to reset screen.

PORT BARRE—ST. LANDRY PARISH

Port Barre Oil Co.'s No. 1 Sibille (W.O.), Sec. 20-6n-5e, 600 ft. S and 124 ft. E. NW cor. of 30-ac. tr. .... Standing 3,572 ft.

STARKS—CALCASIEU PARISH

Emerson & Stark's No. 2 Industrial, 400 ft. S of No. 1, in SE cor. NE NW, Sec. 30-9s-12w..... Drlg. sand 4,475 ft.

Gulf Ref. Co.'s No. 31 Lutcher-Moore, Sec. 19-9s-12w, 500 ft. E of No. 15 ..... Sand showing oil 3,698 ft; cmtd. csg.

SWEET LAKE—CAMERON PARISH

Pure Oil Co.'s No. 11 Yount Lee, Sec. 12-13s-8w, 800 ft. S 66 deg. 42 min. from No. 9 ..... Drlg. broken lime and sticky shale 2,120 ft.

TEXAS

MISCELLANEOUS WILDCATS

AUSTIN COUNTY

Great Southern Oil Co.'s No. 1 Schevojsa, 329 ft. N, 78° E of N cor. B. Dottery Sur. ..... S.D. 2,848 ft.

BRAZORIA COUNTY

Danciger O. & R. Co.'s No. 1 W. C. Hunt, Pledger, 5,220 ft. from the N line and 6,500 ft. from E line of W. Colrson Sur. ..... Drlg. shale 6,633 ft.

John Deering's No. 1 C. W. Chapman, 294 ft. from S line and 104 ft. from E line of Lot 2, Andrew Robinson Sur. ..... Drlg. sandy shale 5,424 ft.

Gulf Prod. Co.'s No. 1 American National, E. R. Bradley Sur. No. 12, 7,594 ft. E and 900 ft. N of SW cor. of 1,472-acre tract ..... Rig.

Gulf Prod. Co.'s No. 1-B H. P. Lockwood, Wiley Martin Sur. No. 9, 3,024 varas S. 45° W along SE line of Lockwood 536-acre tract from E cor., thence 241 varas NW at right angles from said line ..... Drlg. gumbo 2,666 ft.

(Continued on Page 72)

A. D. Parsons et al's No. 1 Hughes, 1,500 varas, NE from W cor. along NW line of A. L. D. Lewis Sur., and 300 varas SE at right angles in Hughes 320-acre tract ..... Coring sand 2,345 ft.
Shell Pet. Corp.'s No. 5 Blakely-Winston, Danbury, 1,410 ft. N 63° and 1,200 ft. N 27° W of SW cor. of H.T.&B. Sur. No. 14 ..... Coring brittle shale 4,673 ft.
Tri-fin Oil Co.'s No. 1 Moers, 1,635 ft. southwest of Chocolate Bayou and 693 ft. SE of NW line of F. Moore Sur. ..... Drlg. 1,971 ft.

BURLESON COUNTY

Ball & Knob's No. 1 Polansky, M. B. Lawrence Sur., 359 ft. from E line and 469 ft. from N line of 155-ac. tr. ..... No report.
S. M. Bracey et al's No. 1 Bracey, J. Lastly Sur., 330 ft. from E cor. of P. Taylor 110 acres, SE along NE line of J. G. Houston 160 acres, thence 150 ft. at right angles in 3-acre tract ..... S.D. 2,340 ft.
Sampson Oil & Gas Co.'s No. 3 Duckworth & Gilley, P. Singleton Sur., 50 ft. SE of No. 1 ..... No report.
J. E. Stubblefield et al's No. 1 Mitchell, A. T. Woolridge Sur., 81 ft. SW and 4,340 ft. SE of S cor. of Joseph Hanson Sur. ..... Gumbo 600 ft.; standing.

COLORADO COUNTY

Smith, Adair et al's No. 1 Barnett, 230 ft. from W line and 330 ft. from S line of Blk. 36, Q. K. Winn Sur. ..... Drlg. shale 4,407 ft.

FORT BEND COUNTY

Lowrie & Young's No. 1 Jackson Brown, Pilant Lake, Wm. Barrett & Abner Harris Sur., 150 ft. out of SW cor. of Brown 1,000-acre tract ..... Moving in rig.
Lynch et al's No. 1 Knelts, 690 ft. from NW line and 350 ft. from SW line of Sec. 43, H.&T.C. Sur. ..... Shut down for repairs 672 ft.
Magnolia Pet. Co.'s No. 1 Hampil, H. Christman Sur., 1,242 ft. N and 385 ft. W from SW cor. of J. W. Slavin 25 acres ..... Drlg. hard sand 4,856 ft.
Naylor & DeCoste's No. 1 Naylor, 4,250 ft. N, 55 deg. E from SW cor. 653-acre tract in Christman Sur. ..... Drlg. sandy shale 7,704 ft.
North Star Pet. Co.'s No. 1 Guyler, Andrew Roberts Sur., 330 ft. out of SW cor. of 100-acre tract ..... Drlg. shale 5,002 ft.
Paul & Gerke's No 1 Krenek, Gale Borden Sur., 150 ft. out of NW cor. of tract ..... Derrick.
Reisinger et al's No. 1 Joe Sitter, Long Point, T. J. Bell Sur., 150 ft. SW and 150 ft. SE of N cor. of 80-acre tract ..... Tested S.W.; sand 928-40 ft.

GALVESTON COUNTY

Humble Oil & Ref. Co.'s No. 1 Rosenkranz, Green's Bayou, center N half of Lot 10, Sarah White Sur. ..... Drlg. sand and shale 6,185 ft.

GRIMES COUNTY

Barnett et al's No. 1 Dodd, Timothy Jones Sur. ..... T.D. 2,689 ft; 6⅝-in. csg. 2,660 ft; bailed csg. and swbd. S.W.; standing.
W. J. Brightwell's No. 1 Combs, Samuel Beauman Sur., 350 ft. from S line and 632 ft. E of extreme W line of 276-acre tract ..... Coring sandy shale 4,206 ft.
Petroleum Southwestern Corp.'s No. 1 Greer Bros., Pat B. O'Connor Sur., 450 ft. S and 200 ft. E of SW cor. of 43-acre tract ..... Derrick.

ARIOLA—HARDIN COUNTY

Gulf Prod. Co.'s No. 1 Kirby, Ariola, 330 ft. out of SE cor. of 100-ac. tract, Ariola Sur. ..... Drlg. wtr. sand 4,771 ft.
Houston Oil Co.'s No. 1-Y Ariola fee, 5,610 ft. from W line and 5,610 ft. from N line of Ariola Sur. ..... Cmtd. 13-in. csg. 862 ft.
Houston Oil Co.'s No. 1-Z Ariola fee, 3,000 ft. from W line and 5,610 ft. from N line of Ariola Sur. ..... Drlg. sandy shale 3,382 ft.
Republic Prod. Co.'s No. 2 Ariola fee, Ariola Sur., 660 ft. due E of Gulf's No. 1-A Kirby ..... Drlg. black shale 4,433 ft.
Republic Prod. Co.'s No. 3 Ariola fee, Ariola Sur., 660 ft. due S of Gulf's No. 1-A Kirby ..... Derrick.

HARDIN COUNTY

Chas. Paggi's No. 1 Hooks, 200 ft. out of NW cor. of Wm. Slade Sur. ..... S.D. 1,650 ft.
Joe E. Proctor's No. 1 Russell & Teagle, 2,550 ft. E and 2,777 ft. N of NW cor. of Wm. W. Young Sur. ..... Drlg. shale 2,923 ft.
Republic Prod. Co.'s No. 1 Ben Andrews fee, 1,140 ft. W of Neches River and 345 ft. N at right angles in Van Meter Sur. ..... Drlg. shale 4,708 ft.

HARRIS COUNTY

T. V. Buckholve & Sons' No. 1 Miller, Arthur McCormick Sur. ..... S.D. 1,310 ft.
Cherry & Pritchard's No. 1 Dr. Griffith, S. Bell Sur., 553 ft. from E line and 60 ft. from N line of 250-acre tract ..... T.D. 756 ft.; cmtd. 10-in. csg 65 ft.
John Deering's No. 1 Warren, Hockley T. Snell Sur., 100 ft. due south of The Texas Co.'s No. 3 Warren ..... S.D. 2,411 ft.
Koinm Prod. Co.'s No. 1 Burt & Griffith, 2,100 ft. W of E line of A. R. Bowman Sur. and 2,600 ft. S of Spring Creek ..... Abd. 1,030 ft.
H. D. Morse et al's No. 1 Schivelnie, Wm. White Sur., 900 ft. S 30° W of NW cor. of Lienberger 10-ac. tract in Blk. 1 ..... Drlg. sandy shale 5,604 ft.; D.S. test 5,514-80 ft. showed dry gas.

JASPER COUNTY

Gulf Prod. Co.'s No. 1 Miller Vidor, 2,893 ft. S and 112 ft. E of NW cor. of Sarah Gray Sur. ..... Drlg. shale 4,305 ft.
Houston Oil Co.'s No. 1 Richardson fee, 2,000 ft. S and 2,002 ft. W of NE cor. of Ben Richardson Sur. ..... Drlg. gumbo 3,211 ft.
P. Michael et al's No. 1 Eck, G.C.&S.F. Sur., 502 ft. from N line and 497 ft from E line of tr. ..... Abd. 1,706 ft.
Smitherman, Neilson & Noble's No. 1 Cameron, SE cor. of Cameron Lbr. Co. tract, Wm. Jones Sur. ..... Moving in.

JEFFERSON COUNTY

Coastal Oil Co.'s No. 1 Young, 250 ft. from E line and 140 ft. from S line of 40-acre tract in Blk. F-5, Lot 6, Joseph Grigsby Sur. ..... Drlg. shale 2,946 ft.
Blam & Pipkin's No. 2 Broussard, John McGaffey Sur., 150 ft. due E of No. 1 ..... Shut down 1,855 ft.
Jack Schultz' No. 2 Todd, Cheek, 1,800 ft. S of No. 1 and 130 ft. E of W line of Wm. Carr Sur. ..... Drlg. tough gumbo 5,238 ft.

LIBERTY COUNTY

Leon Brisley's No. 1 J. M. Neal, Edward Tanner Sur., 1,800 ft. E, 1,800 ft. N of most westerly NW cor. of Margaret Evans Sur. ..... No report.
Mayse et al's No. 1 Dunman, J. C. Martin Sur., 1,111 ft. from S line of survey and 2,340 ft. W of Trinity River ..... Rig.

MATAGORDA COUNTY

Cockburn Oil Corp.'s No. 5 Hawkins, Shepherds Mott, 2,200 ft. SE and 1,800 ft. NE of W corner of Daniel McCarthy Sur. ..... Building derrick.
Danciger O. & R. Co.'s No. 1 Turner, 4,900 ft. from NE line and 1,800 ft. from SE line of M. Cummings Sur. ..... Surface clay 30 ft.; derrick down
Dr. Griffith et al's No. 3 Baer, Big Hill, 5,000 ft. N, 2,000 ft. E from SW cor. of Seth Ingram Sur. ..... Standing 2,720 ft.
Rugeley et al's No. 1 Cleveland, E. Hall Sur., 450 ft. E of Cottonwood Creek and 200 ft. N of S line of 60-acre tract ..... No report.

MONTGOMERY COUNTY

Miller Prod. Co.'s No. 1 Foster Lbr. Co., M. B. Lawrence Sur., 2,640 ft. from N line and 300 ft. from E line of 413-acre tract ..... Shut down 4,020 ft.
A. H. Parsons et al's No. 2 Drought, Kronknite Sur., 3,000 ft. N and 100 ft. E of NW cor. of A. B. Hill 46½ acres ..... Rig.
Rheubotham et al's No. 1 A. H. Salls, Wm. Barker Sur., 890 ft. from E line and 400 ft. from N line of W 56 acres of Salls tract ..... Spudded and S.D.
Sutton-Hawkins' No. 1 Foster, Rosca de la Garza Sur., 3,333 ft. N and 1,320 ft. E of NE cor. of W. J. Johnson 160-ac. tract ..... Coring shale 4,268 ft.

NEWTON COUNTY

L. A. James et al's No. 1 Price, T.&N.O. Sur., 1,000 ft. from W line and 500 ft. from N line of tract ..... S.D. 1,980 ft.
Sun Oil Co.'s No. 1 Peevey Moore Lbr. Co., 3,145 ft. from S line and 1,325 ft. from W line of F. Stoevar Sur. No. 4 ..... Drlg. shale 6,525 ft.

ORANGE COUNTY

Republic Prod. Co. and Houston Oil Co.'s No. 1 Hurst fee, 2,000 ft. W and 2,200 ft. N of SE cor. of Ed Hurst Sur. No. 15 ..... Cmtd. 13-in. csg. 857 ft.
E. L. Smith Oil Co.'s No. 1 Miller-Vidor, 750 ft. E and 200 ft. N of SW cor. of J. M. Swisher Sur. No. 3 ..... Spudded.

POLK COUNTY

Anderson et al's No. 1 Duke, Peter J. Manard Sur., 330 ft. out of NW cor. of 235-acre tract ..... Cmtd. 10-in. csg. 755 ft.; standing
Koch & Stevens' No. 1 Ruth Lawrence, Castillian Sur., 300 ft. from W line and 790 ft. from S line of 54-acre tract ..... Drlg. shale 2,195 ft.
Tony & Purdy's No. 1 Martha Roberts, Joaquin T. De Rumayor Sur. ..... Drlg. shale 3,212 ft.
Dick Schwabb and Shell Pet. Corp.'s No. 1 Davis & Holmes, A. Viesca Sur., approx. 1,050 ft. W and little S of Dick Schwabb's No. 1 Carlton & Davis ..... Rigging up.

REFUGIO COUNTY

Humble Oil & Ref. Co.'s No. 3 O'Connor, Florentine Rice Sur., 13,757 ft. from S line at right angles and 3,412 ft. from E line at right angles of 5,545-acre ranch ..... Cmtd. 13⅜-in. csg. 2,335 ft.; drlg. plug.

SAN JACINTO COUNTY

Weaver et al's No. 1 Delta Land & Timber Co., 1,400 ft. NE of SW line of James W. Robertson Sur., and 800 ft. at right angles ..... Derrick.

TRINITY COUNTY

C. M. Beckner's No. 1 Gibson, Wm. Beasley Sur., 600 ft. S along E line of survey and 150 ft. W at right angles ..... Spudded.

TYLER COUNTY

Republic Prod. Co. and Houston Oil Co.'s No. 1 Sam Jeffcoat, E. Thompson Sur., 467 ft. N and E from SW cor. of 100-acre tract ..... Location.
Republic Prod. Co. and Houston Oil Co.'s No. 1 Kirby, E. Thompson Sur., 467 ft. N and E from NE cor. of Sam Jeffcoat 100 acres ..... Derrick.
Republic Prod. Co. and Houston Oil Co.'s No. 1 Sterne fee (W.O.), 5,384 ft. from W line and 484 ft. from N line of Adolphe Sterne Sur. ..... Comp. Oct. 9, as wet gasser 4,708 ft.; stopped producing; rig up to W.O.

VICTORIA COUNTY

Gulf Prod. Co.'s No. 3 Keeran Ranch, Martin DeLeon Sur., 1,320 ft. NW of No. 1 ..... Rig.
Houston Oil Co. and Magnolia Pet. Co.'s No. 1 Beck, I.R.R. Sur. No. 26, 1,000 ft. NE along NW line from most westerly west cor. of Lot D and 600 ft. SE at right angles ..... Cmtd. 12½-in. csg. 602 ft.
Humble Oil & Ref. Co.'s No. 1 Pete Rydolph, John Kemper Sur., 2,617 ft. from E line and 1,013 ft. from W line of lease ..... Drlg. shale 6,800 ft.
Slick-Seeligson Corp.'s No. 2 McFaddin (D.D.), J. Varian Sur., 1,100 ft. NE of SW line and 635 ft. E of railroad ..... No report.
Union Oil Co.'s No. 2 Keeran, Martin DeLeon Sur., 500 ft. E of E line of Gulf lease and 1,900 ft. N of railroad ..... Drlg. shale 1,348 ft.

WALLER COUNTY

Bancho Oil Co. and Jim Oil Co.'s No. 1 Joe W. Harris, 3,000 ft. from E line and 5,000 ft. from N line of H.&T.C. Sur. in Harris 1,475-acre lease in Justo Liendo Sur. ..... Drlg. sandy shale 4,056 ft.
Birdwell et al's No. 1 Robertson, John Baker Sur., 1,625 ft. from S line and 450 ft. from W line of 64-acre tract ..... Derrick.

WASHINGTON COUNTY

M.O.&T. Corp.'s No. 1 Giddings, S. Young Sur., 200 ft. from S line and 150 ft. from W line of 698-acre tract ..... Shut down 65 ft.

WHARTON COUNTY

Cullen & West's No. 1 Hawes, G. W. Singleton Sur., 530 ft. NE and 320 ft. SE of W cor. of Hawes' 148-acre tract ..... Spudded.
Cullen & West's No. 1 J. D. Hudgins, Alexander Jackson Sur., 330 ft. out of S or SE cor. of J. D. Hudgins' 319-acre tract ..... Rig.
Gantt et al's No. 1 Laura Hahn, N. Manch Sur., 330 ft. out of NE cor. 142.17-ac. tract ..... Drlg. gumbo 4,525 ft.
Smith & Daniels' No. 1 Mitchell, H.&T.C. Sur. No. 8, 320 from NE line of NE 80-acre tract in C of tract NW and SE ..... Coring sandy shale 4,564 ft.
Steed Prod. Co.'s No. 1 Tucker, 210 ft. W and 50 ft. N of NE cor. of S½ of SW¼ of Sec. 58, E.T.R.R. Sur. ..... Derrick.

SOUTH LOUISIANA

BEAUREGARD PARISH

DeRidder Dev. Co.'s No. 1 McMahon, 200 ft. W and 166 ft. S of NE cor. of NW of Sec. 33-3s-9w ..... Standing 1,286 ft.

CALCASIEU PARISH

Cannon & Hughes' No. 1 J. S. Reed, Sec. 18-10s-12w ..... Derrick.
I. R. Irvine et al's No. 1 A. D. Mimms, 741 ft. N and 741 ft. W of SE cor. SE NE, Sec. 20-9s-7w ..... S.D. 1,225 ft.

JEFFERSON DAVIS PARISH

B. D. Finly's No. 1 Clarphy Lognion, SW NW of Sec. 22-10n-4w ..... Spudded.

PLAQUEMINES PARISH

Lake Washington-Freeport Sulphur Co.'s No. 3 Cockrell-Moran, 5,100 ft. E and 1,000 ft. S of Washington Station, Sec. 14-20s-26e ..... Sulphur test.
Lake Washington-Freeport Sulphur Co.'s No. 5 Cockrell-Moran, 5,200 ft. E and 850 ft. N of Washington Station, Sec. 14-20s ..... Sulphur test.
The Texas Co.'s No. 6 Garden Island Bay, 1,848 ft. S and 2,497 ft. W of NE cor. of Sec. 107-23s-32e ..... Location.

TERREBONNE PARISH

The Texas Co.'s No. 7 Calliou Island, 300 ft. S and 300 ft. W of NE cor. of Sec. 19-23s-20e ..... Location.
The Texas Company's No. 6 State-Dog Lake, 3,230 ft. W and 908 ft. N of SE cor. of Sec. 31-21s-16e ..... Salt 2,531-2,900 ft.; abd.
The Texas Company's No. 7 State-Lake Pelto, 2,216 ft. N, 104 ft. W of SE cor., Sec. 8-23s-18e ..... Cap rock 2,180-2,240 ft; abd.
The Texas Company's No. 17 State-Lake Barre, 1,476 ft. W and 626 ft. S of NW cor. of Sec. 20-21s-20e ..... Salt 2,979-3,840 ft.
The Texas Company's No. 4 Lake Barre-L.L.&E., 2,363 ft. S and 2,075 ft. W of NW cor. of Sec. 30-21s-20e in Sec. 36-21s-19e ..... Derrick.

VERMILLION PARISH

Shell Pet. Corp.'s No. 1 Hebert, 2,310 ft. W and 330 ft. N of SE cor. of Sec. 10-15s-1e ..... Location.

VERNON PARISH

Minerals Division Llano Co.'s No. 1 Llano Del Rio, 543 ft. E and 300 ft. S of NW cor. of NW of Sec. 34-1n-9w ..... No report.

TECHNICAL QUESTIONS ANSWERED

By Charles K. Francis, Ph. D., Technical Editor

This department of The Oil and Gas Journal is devoted to the manufacturing branches of the oil industry.

Those connected with the refining of crude petroleum, the manufacture of natural gasoline and closely allied industries are invited to submit their problems to Dr. C. K. Francis, technical editor. The department was created for the purpose of aiding managers, superintendents, engineers, chemists and all those engaged in the various phases of plant operation; also those connected with marketing and utilization of petroleum products.

Questions should be submitted in as much detail as possible so as to assure a satisfactory answer.

All inquiries should be signed and if other than the given initials are to be used please indicate the desired letters.

Questions involving patented processes, intricate formulas, and calculations and estimates of costs, for obvious reasons, cannot be answered. The replies will appear on this page within a reasonable time.

Gas for Motor Fuel Shows Possibilities in France

I have read of the use of gas in place of gasoline by the French during the war and wish to know if there have been any efforts to replace gasoline in this way within recent years?—E. F. O.

Numerous investigators have experimented with gas for motor fuel purposes, the earliest work appearing to have been done in the United States. War conditions stimulated the search for a gasoline substitute in both Germany and France, where there were successful applications of gas for motor fuel. A large number of cars operating in Paris carried a cumbersome container on the top which held the gas required for the operation of the vehicle. The Paris Gas Co. has ever since been interested in the possibilities of gas as a motor fuel and the present knowledge of its application is largely due to the activity of this company.

The clumsy and unsightly envelope was first replaced by cylinders in which the gas was held under pressure; recently a very light weight cylinder about which a fine piano wire had been wound, to reinforce the metal and prevent rupture, has been made. The ordinary cylinder used in this service has a capacity of 150 cubic feet under a pressure of about 120 atmospheres and weighs approximately 150 pounds. The wire-wound cylinder reduces this weight one-half. The distribution cost has been found to be about 4 cents within a radius of 30 to 35 miles. The gas, methane, costs 7.5 to 9 cents per 100 cubic feet.

The transportation cost would be materially reduced if the gas were piped to a central point for distribution. There has been built in Germany an extensive pipe line for the distribution of artificial gas made from coal and the same source can supply over 7,000,000,000 cubic feet of methane annually suitable for motor fuel. It is this gas which the Paris Gas Co. has found so satisfactory. The arrangement of the engine for gas fuel may be briefly described. The gas is delivered to an expansion chamber which is capable of permitting varying quantities of gas to pass according to running speed, at the same time sensitive to a pressure head which may range from 200 to 1 atmosphere. From the expansion chamber the gas passes to a mixing device where the required volume of air is thoroughly intermingled with the gas. The Paris company used two concentric tubes, a butterfly valve controlling the gas through the inner tube while the air supply in the outer one could be increased or decreased by means of a sleeve moving over the circular opening through which the air entered. The movements of these are controlled by the accelerator pedal through a swivel joint. This arrangement has been successful in motors from 12 to 90 horsepower with gases ranging from 340 to 860 B.t.u.

Prof. R. V. Wheeler, University of Sheffield, speaking before the Oil Industries Club, London, June 7, 1932, reported data relating to volumes required and the expense, in substance as follows:

In Paris the gas-compressing station served nine vehicles, which included buses, trucks and tractors. The buses with a load of 8 tons used 46 cubic feet of gas (of 470 B.t.u. per cubic feet) per mile; a truck with a total weight of 6½ tons used 28 cubic feet per mile in normal service.

In comparison with gasoline, 1 gallon of gasoline at 24 cents contained 1½ therms and occupied 0.16 cubic feet. A bus running 100 miles per day required 20 gallons of gasoline (5 miles per gallon), which occupied 3.2 cubic feet. The gas-bus used in the Paris tests used 46 cubic feet for a run of 100 miles. This volume of gas at 200 atmospheres pressure would occupy 23 cubic feet and the weight of the gas containers would be about 1,000 pounds.

While gasoline at 24 cents per gallon cost 16 cents a therm, the cost of gas for commercial purposes could be as low as 4 cents per therm (200 cubic feet of 500 B.t.u. per cubic foot calorific value). To that had to be added the cost of compression, which could be estimated at about 3 cents per therm if the scale of operations was sufficiently large.

Some of the important companies of France now use gas when making bench tests on the engines before they are set in position on the chassis.

Characteristics of Cleaners' and Solvent Naphthas Described

Is there any difference between cleaners' naphtha and solvent naphtha? If there is a different process used for making these will you kindly explain?—L. C. S.

Certain petroleum naphthas are used for the dry cleaning of textiles and others are used in the preparation of varnishes and paints; so, in a broad sense, these may be called cleaners' naphtha and solvent naphtha. However, the term solvent naphtha is much older than the petroleum naphtha used for the indicated purpose and it is much cheaper to be specific when mentioning either.

Petroleum naphtha is used by some refiners to designate any fraction, or fractions, in the raw state which is later to be refined and blended to make the several grades of commercial gasoline. The same term is used in the trade to indicate a finished product of narrow boiling range, somewhat heavier and less volatile than gasoline. The cleaners' naphtha may have a boiling point from about 200° F. to 400° F. The hydrocarbons present are those belonging to the paraffin series.

Solvent naphtha is the name which has long been used for the mixture of benzene hydrocarbons that are obtained during the distillation of coal tar, the most important being benzol, tuluol and xylol. This naphtha ranges in boiling point from approximately 250° F. to 400° F.

Within the past few years the petroleum industry has by the process of close fractionation, manufactured a range of solvents, sometimes called solvent naphthas, which are nearly pure hydrocarbons. These include commercial hexane, heptanes and octanes. These have a pleasant odor and are practically free from sulphur.

Flashpoint Has No Relation to Quality of Lubricating Oil

Please tell me whether the quality of a lubricating oil is determined by its flashpoint?—M. M. C.

The flashpoint of a petroleum liquid is the temperature to which it must be heated before an inflammable vapor will be involved. This temperature is important as indicating a possible fire hazard. The manufacture of kerosene, for example, is carefully controlled to prevent the final product from having a dangerously low flashing temperature, because of the possible danger when this oil is used as an illuminant or for heating. This is the most important value of flashpoint.

The flashpoint of lubricating oil is so high that it has no bearing on fire hazard. It has nothing to do with the lubricating quality. The only purpose it may serve the expert is its relation to other properties which help to identify and possibly classify an oil.

The report of Committee D-2, American Society for Testing Materials, The Significance of Tests of Petroleum Products, page 22, states: "The interpretation of figures is not simple and as a general rule it may be said that the flashpoint of a lubricating oil bears no direct relation to its usefulness. Flashpoint tests are useful to refiners in controlling the manufacturing process. The usual practice in writing specifications is to attempt to identify certain types of oils which are known through experience to be suitable. Existing methods for determining the actual usefulness or value in lubricating oils are not satisfactory and in general it may be stated that the use of flashpoint limits in lubricating oils specifications is actually a makeshift to compensate for a large factor of ingorance."

Road Oil Specifications Are Not Standardized by States

We wish to obtain a list of all the state specifications covering road oils and would appreciate if you will inform us where such a publication may be secured. Is there any standard or general specification for road oil? Can you furnish a good definition for road oil?—L. B. and R. E. P.

Road oil is the residual, essentially asphaltic, derived from asphaltic base and intermediate or mixed base petroleums. There are no standard specifications. The highway departments of the several states have prepared specifications but the requirements vary to a considerable extent. The general specification, adopted by many highway departments, requires that it shall be either a naturally homogeneous oil, or a homogeneous residue of oil. It shall not have been distilled at a temperature high enough to injure the oil by burning, or to produce any carbonaceous matter, and shall not be obtained by the blending of various grades of oil, or the addition of solid asphalt to lighter oils or distillates.

The manufacture of road oil is based on principles that are similar to those which must be observed when making asphalt. That is, the oil must be free from solid particles of carbon formed when the heating is carried to the point of decomposition. Some states mention this. California requires that the road oil must not be heated to a temperature greater than 600° F. in the refining process. The refiner now controls this feature by conducting the final stage of the evaporation in a vacuum still.

The general character of the specifications for road oils is indicated in summary of the specifications of the several states mentioned in the table:

SUMMARY OF ROAD OIL SPECIFICATIONS

Grades—	Mo. 4	Okla. 7	Tex. 4	Wash. 4	Ill. 3	N. Mex. 1	Calif. 1
Sp. gr. @ 60° F.	.91/.96	.93/1.0	-/.95	.....	.92/1.07	.....	.....
Vis. furol @ 122° F.	40/100	56/562	.....	40/300	.....	.....	.....
Vis. specific @ 132° F.	9/85	8/100	25/160	.....	10/42	25/45	.....
Bitumen CS_2 sol. min. pct.	99.5	99.6	99/99.5	99	99.5	.....	99
Loss 5 hrs. @ 325° F.	0/25	0/30	-/12	.....	.....	.....	.....
Per cent residue of 100 pen. @ 77° F.	58/85	50/85	55/100	*30/95	.....	60/70	*94
Ductility of residue @ 77° F.	50 cm.	60/100	-/100	.....	.....	.....	†1
Insol. 86 naphtha not over, pct.	0/10	.....	.....	6	8/10	.....	.....
Application temp. °F.	100/200	.....	.....	125/400	120/200	125	300/400
Flash °F. min.	.....	50/190	80/225	150/395	176	195	.....
Water and sediment, max.	.....	.....	0/1	1.5/2	0.5	2	1.5
Wax, max. pct.	.....	.....	.....	‡2	.....	2	.....

*Of 80 penetration. †At 95° F. ‡Subject to revision.

The specifications of the Oklahoma highway department were published on this page in the issue of September 17, 1931.

The most important properties include: Percentage of bitumen, soluble in carbon disulphide, which is usually 99.5 per cent but a few states have 99 per cent as the low limit. Percentage of residue of 100 penetration at 77° F., which may range from 50 to 100. Ductility of 50 grams evaporated at 482°-500° F. to 100 penetration, varies over a wide range.

NATURAL GAS DEVELOPMENTS

Lone Star Rate Report Expected To Be Ready Soon

The gas rates of the Lone Star Gas Co. may not be brought below the 62-cent figure proposed last February when the Oklahoma Corporation Commission split over the rate. Paul Reed, commission auditor, is working on a report to the commission, out of which an order will be drawn. He indicated it would be completed in about 10 days. It was understood the commission's figures will not show a basis for a rate much, if any, below the 62-cent rate proposed by Paul A. Walker, commission chairman, last February, at the close of the first hearing. The present rate averages 76 cents for the 26 towns and cities served by the Community Natural Gas Co., subsidiary of the Lone Star.

C. C. Childers, Democratic member, and E. R. Hughes, Republican, refused to approve Chairman Walker's proposed order last February. Childers thought the rate should be as low as 45 cents. Hughes thought proper valuations should be shown for a rate base. Hughes and Childers ordered the additional appraisal by Hawley, Freese and Nichols, Fort Worth engineers, to show Texas valuations of the Lone Star, along with valuations in this state. It was said that this appraisal will not give additional basis for rate reduction.

NATURAL GAS FOR MEXICO, MO.

MEXICO, Mo., Oct. 29.—Natural gas was turned into the distribution system here for more than 700 consumers by the Missouri Power & Light Co., to replace artificial gas, at lower rates. The gas is piped into the city by the Panhandle-Eastern Pipe Line Co.

L.A.G.&E. APPEAL

WASHINGTON, D. C., Oct. 31.—The Los Angeles Gas & Electric Corp. has asked the Supreme Court to pass on the validity of a 9 per cent reduction in its gas rates ordered by the California state regulatory commission. It insisted the reduction would prevent earning a fair return on the value of its property.

Bureau of Mines Report on Natural Gas Production and Consumption in 1931

By G. R. HOPKINS

The steady expansion of the natural gas industry during the past decade was interrupted in 1931 when the production declined for the first time since 1921. The total marketable production in 1931 amounted to 1,686,436,000,000 feet, a decline of 256,985,000,000 feet, or 13 per cent, below 1930. This decline may be attributed chiefly to a falling off in demand for field purposes and for the manufacture of carbon black.

Exports of natural gas to Canada and Mexico increased in 1931, totaling 2,231,000,000 feet, of which 74,000,000 feet went to Canada. Imports into the United States (Montana) from western Canada increased from 21,000,000 feet in 1930 to 44,000,000 feet in 1931. The natural gas produced in 1931 had a total value at the wells of $117,505,000 and at points of consumption of $392,816,000.

Total consumption, production plus imports minus exports, of natural gas in 1931 amounted to 1,684,249,000,000 feet. Of this amount 571,365,000,000 feet, or 34 per cent, was used for field purposes, 380,897,000,000 feet, or 23 per cent, was used for domestic and commercial purposes, 195,396,000,000 feet, or 12 per cent, was burned in the manufacture of carbon black, 138,343,000,000 feet, or 8 per cent, was utilized as fuel at electric public-utility power plants, 75,548,000,000 feet, or 4 per cent, was utilized as fuel at petroleum refineries, leaving 322,700,000,000 feet, or 19 per cent, used for other industrial purposes. In comparison with 1930, these data represent gains in the proportions distributed for domestic and commercial consumption, electric public-utility power plants and general industrial uses, at the expense of the proportions distributed for field and refinery purposes and for the manufacture of carbon black.

The increase of 1.2 per cent in the amount of natural gas served to domestic and commercial consumers, while small, represents a notable achievement in a year of almost universal declines in fuel consumption. The increase was due largely to the opening of several new interstate lines and to the full year's operation of several on which service was inaugurated late in 1930. Without the new business accruing from the operation of the new lines, the quantity of natural gas served to domestic and commercial consumers in 1931 probably would have declined.

Gain in Consumers

With the exception of 1919, the number of domestic and commercial consumers has shown a steady increase since 1906. In 1931, the number rose to 6,976,000 from 5,448,000 in 1930, a gain of 28 per cent. This material gain resulted primarily from the opening of new lines traversing several states, but it should be noted that many of the new customers were served with mixed gas and may also be considered as consumers of manufactured gas. Accordingly, the decrease in average annual use per consumer from 69,100 cubic feet in 1930 to 54,600 cubic feet in 1931 was considerably in excess of the actual decline.

The average price paid in natural gas by domestic and commercial consumers has shown a steady increase in recent years. In 1931 the average was 65.5 cents per thousand feet, compared with 63.5 cents per thousand in 1930. At least a part of this increase of 2 cents in the average price paid by domestic and commercial consumers was due to the mixing of natural gas with relatively higher priced manufactured gas.

Contrary to popular belief, the use of

(Continued on Next Page)

Federal Court Considering Kansas Gas Rate Order

TOPEKA, Kans., Oct. 31.—A three-judge Federal court has taken under advisement the gas rate litigation between the state of Kansas and Cities Service Co. subsidiaries after listening to the arguments of attorneys.

That a decision would not be handed down until around November 10 at the very earliest was indicated when Judge Orie L. Phillips announced attorneys for the Cities Service interests would be allowed seven days to file their brief and counsel for the State an additional week to file their replier brief.

The litigation involves an effort by 10 Cities Service subsidiaries to enjoin enforcement of a public service commission order finding 30 cents per 1,000 feet a reasonable price to be paid by distributing companies to Cities Service Gas Co., pipe line unit, for main line domestic gas, instead of the present 40-cent charge, and disallowing a 1½ per cent management fee paid to Henry L. Doherty & Co.

The commission had directed the companies to show cause why the directed reduction in expenses should not be passed on to the consumers.

NEW HUTCHINSON RATES

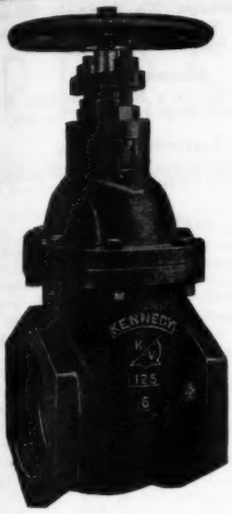
TOPEKA, Kans., Oct. 31.—The Hutchinson Gas Co. has filed with the Public Service Commission a new schedule of rates providing reductions in present charges. Effectiveness of the new schedules was made contingent on legality of a new franchise recently granted the company by the city commission being upheld in the courts. Mandamus proceedings to require city officials to submit the franchise to a popular vote are pending in the Supreme Court.

The proposed schedule is 90 cents for the first 1,000 feet, 40 cents each for the next 4,000 feet, 35 cents each for the next 45,000 feet and 30 cents each for the next 100,000 feet. The present rate is $1 for the first 1,000 feet, 50 cents each for the next 19,000 feet, 40 cents each for the next 80,000 feet and 35 cents for each additional 1,000 feet.

Official Summary of Natural Gas Statistics on Production and Consumption for Year 1931

State—	Production: Quantity (millions of cu. ft.)	Production: Estimated average value at wells per M cu. ft. (cents)	Production: Average value at points of consumption M cu. ft. (cents)	Consumption: Domestic (inc. commercial): Thousands of consumers	Consumption: Domestic (inc. commercial): Consumption (millions of cu. ft.)	Consumption: Domestic (inc. commercial): Average value at points of consumption per M cu. ft. (cents)	Consumption: Industrial: Field (drilling, pumping, operating gasoline plants, etc.): Millions of cu. ft. (estimated)	Consumption: Industrial: Field (drilling, pumping, operating gasoline plants, etc.): Value (thous. of dollars) (estimated)	Consumption: Industrial: Manufacture of carbon black: Millions of cu. ft.	Consumption: Industrial: Manufacture of carbon black: Value at points of consumption (thous. of dollars)	Consumption: Industrial: Fuel at petroleum refineries, electric public-utility power plants, and other industrial: Millions of cu. ft.: *Petroleum refineries	Millions of cu. ft.: Electric public-utility power plants	Millions of cu. ft.: Other industrial	Value at points of consumption (thous. of dollars)*
Alabama	.....	.....	.....	33	798	127.8	.....	.....	.....	.....	.....	.....	7,660	1,308
Arkansas	13,300	5.1	20.3	67	7,623	51.0	10,113	803	.....	.....	2,117	1,803	10,632	1,853
California	365,930	7.0	25.0	1,346	54,729	91.5	150,321	10,404	.....	.....	18,234	45,907	36,729	15,847
Colorado	2,536	2.8	37.1	96	5,392	78.4	413	10	.....	.....	5	150	10,932	2,077
Georgia	.....	.....	.....	61	2,256	113.4	.....	.....	.....	.....	.....	1,232	1,416	437
Illinois	2,130	7.9	46.9	999	3,631	125.8	2,038	161	.....	.....	11	.....	8,370	1,854
Indiana	1,337	25.6	52.3	66	1,358	105.1	20	5	.....	.....	.....	1,377	1,940	1,098
Iowa	.....	.....	.....	53	471	110.2	.....	.....	.....	.....	.....	358	2,693	575
Kansas	38,742	8.0	29.7	193	19,402	57.4	10,287	1,201	.....	.....	2,230	11,315	22,375	5,946
Kentucky	27,870	14.9	36.4	160	10,786	50.6	1,316	223	.....	.....	.....	.....	3,431	1,010
Louisiana	224,155	2.9	16.8	137	9,690	57.4	11,806	479	52,204	1,467	8,634	18,612	31,040	6,808
Michigan	472	14.4	23.5	3	32	103.1	43	6	.....	.....	.....	.....	397	72
Mississippi	6,048	4.1	24.1	24	1,961	57.9	13	1	.....	.....	.....	44	2,352	254
Missouri	1,534	8.0	44.7	327	9,734	78.2	7	1	.....	.....	1,106	1,106	12,308	2,847
Montana	10,949	4.1	30.1	25	3,804	44.8	890	98	206	4	125	569	2,765	639
Nebraska	.....	.....	.....	43	1,163	89.2	.....	.....	.....	.....	.....	1,084	2,570	746
New Mexico	19,354	2.1	12.4	12	1,344	52.2	8,427	300	.....	.....	.....	2,357	315	419
New York	7,868	32.5	68.2	274	15,437	69.3	255	101	.....	.....	1	25	1,238	756
Ohio	56,326	17.1	56.9	1,198	80,202	63.1	3,643	996	.....	.....	11	3,180	20,424	9,841
Oklahoma	263,685	4.4	12.4	247	26,273	47.5	185,915	9,176	(†)	(†)	7,510	7,935	†21,316	†4,512
Pennsylvania	74,797	28.2	50.6	665	48,385	61.7	5,039	1,668	.....	.....	785	54	38,366	12,836
South Dakota	13	8.3	33.3	12	1,142	49.7	.....	.....	.....	.....	.....	.....	1,661	262
Tennessee	25	16.0	36.0	42	2,748	69.5	.....	.....	.....	.....	.....	3,729	1,146	899
Texas	464,580	3.2	15.9	532	42,937	65.0	149,034	11,269	135,653	2,279	25,308	37,028	57,672	17,872
West Virginia	124,797	18.9	46.6	171	22,210	36.9	13,326	2,992	.....	.....	876	80	18,623	5,342
Wyoming	39,770	2.8	10.4	17	3,479	43.7	18,447	570	(†)	(†)	8,595	223	†5,878	†797
Other	219	6.8	45.8	184	3,910	81.7	2	.....	7,333	298	.....	175	†5,794	1,321
Total 1931	1,686,436	7.0	23.3	6,976	380,897	65.5	571,365	40,469	195,396	4,048	75,548	138,343	322,700	98,030
Total 1930	1,942,421	7.6	21.4	5,448	376,407	63.5	723,165	59,118	266,625	6,002	98,842	120,290	356,315	111,226

*Includes value of gas used at petroleum refineries and electric public-utility power plants.
†Included under "other states" for United States total and under "other industrial" for state total to avoid revealing figures of individual operators.



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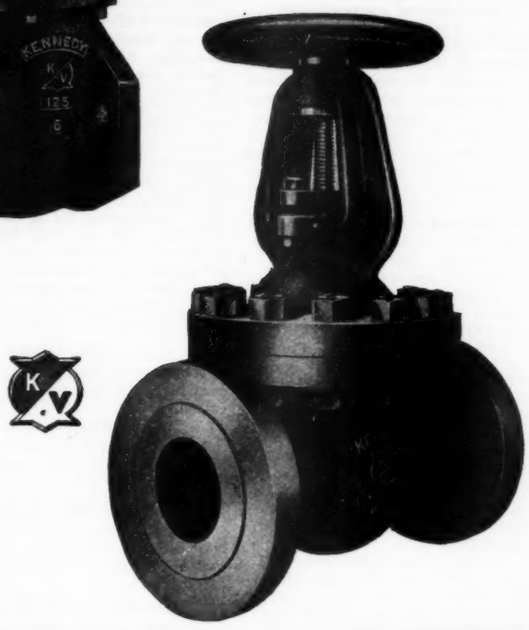

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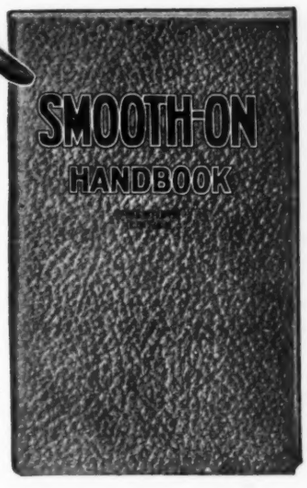

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Bureau of Mines Report on Natural Gas for 1931

(Continued from Preceding Page)

natural gas for field purposes constitutes the largest item in consumption. Field work fell to a low ebb in 1931—for example, only 12,432 wells were completed against 21,240 in 1930—with the result that the quantity of natural gas used for such purposes declined 21 per cent in 1931.

Overproduction, and low prices resultant therefrom, forced the producers of carbon black to restrict their operations in 1931. The demand for natural gas from this source accordingly declined from 266,625,000,000 feet to 195,396,000,000 feet, or 27 per cent.

The consumption of natural gas as fuel at petroleum refineries has declined steadily in recent years as many refiners have found it cheaper to utilize the fuels made at their plants—fuel oil, refinery gas and coke—rather than to buy natural gas from outside companies. In 1931 the consumption of natural gas as refinery fuel totaled 75,548,000,000 feet, a decline of 24 per cent from the 1930 total.

According to the U. S. Geological Survey, the consumption of natural gas at electric public-utility power plants in 1931 amounted to 138,343,000,000 feet, an increase of 15 per cent over 1930. This class of consumption has become an important factor in the industry as its proportion of the total consumption has risen from 3.6 per cent in 1921 to 8.2 per cent in 1931.

The consumption of natural gas for general industrial purposes exclusive of consumption at carbon-black plants, refineries, and electric public-utility power plants totaled 322,700,000,000 feet in 1931, a decline of 9 per cent from 1930. This decrease undoubtedly resulted from a general slowing down of industrial activity.

Producing States

Texas continued to outrank the other states both in the production and consumption of natural gas. Ohio ranked first in the quantity used for domestic and commercial consumption; Oklahoma, in field use; Texas, in the utilization at carbon-black plants and at refineries; California in use at electric public-utility power plants. California displaced Oklahoma as the second ranking natural gas producing state in 1931; this change was predicted several years ago.

The number of producing gas wells, as of December 31, 1931, totaled 55,756, an increase of 736 over 1930. According to The Oil and Gas Journal, the number of gas wells completed in 1931 exclusive of California totaled 1,985, from which it follows that 1,249 wells were abandoned or disconnected in 1931. This was considerably below abandonments in 1930 reflecting a firm market in those states like Pennsylvania which have a large number of small wells.

The interstate movement of natural gas, which had increased steadily for several years, declined in 1931. The total interstate movement recorded for that year totaled 332,538,000,000 feet, compared with 380,601,000,000 feet transported across state lines in 1930. Actually, the decline in 1931 was less than is indicated, as certain duplications were eliminated in 1931 for the first time. The two largest interstate movements, those from West Virginia to Ohio, and from Louisiana to Texas, both declined nearly 10,000,000,000 feet from 1930. Louisiana succeeded West Virginia as the leading state in interstate shipments. The most important new interstate movements were from the Panhandle (Texas) and Hugoton (Kansas) fields to Nebraska-Iowa-Minnesota and to Missouri-Illinois-Indiana.

INTERSTATE TRANSPORTATION OF NATURAL GAS, 1931

	M. cu. ft.
From Colorado	
To Utah	1,590,000
Wyoming	105,000
	1,695,000
From Oklahoma	
To Arkansas	737,000
Kansas	17,013,000
Missouri	5,447,000
Nebraska	31,000
Texas	2,540,000
	25,768,000
From Kentucky	
To District of Columbia	259,000
Indiana	276,000
Maryland	14,000
Ohio	46,000
Virginia	37,000
West Virginia	15,663,000
	16,295,000
From Indiana	
To Kentucky	201,000
From Kansas	
To Colorado	165,000
Illinois	26,000
Indiana	28,000
Iowa	1,795,000
Minnesota	4,000
Missouri	3,033,000
Nebraska	2,802,000
Oklahoma	613,000
South Dakota	8,000
	8,474,000
From Louisiana	
To Alabama	8,103,000
Arkansas	18,241,000
Georgia	4,904,000
Illinois	7,553,000
Mississippi	1,311,000
Missouri	5,406,000
Tennessee	7,598,000
Texas	41,520,000
	94,636,000
From Mississippi	
To Alabama	355,000
Florida	357,000
Louisiana	2,277,000
	2,989,000
From Missouri	
To Illinois	175,000
Indiana	186,000
Kansas	15,000
	376,000
From Montana	
To North Dakota	878,000
South Dakota	2,776,000
	3,654,000
From New Mexico	
To Arizona	357,000
Colorado	106,000
Texas	6,950,000
	7,413,000
From New York	
To Canada	35,000
From Ohio	
To Indiana	1,674,000
West Virginia	294,000
	1,968,000
From Pennsylvania	
To Canada	35,000
New York	9,126,000
Ohio	2,131,000
West Virginia	262,000
	11,555,000
From Texas	
To Arizona	1,882,000
Colorado	15,779,000
Illinois	4,166,000
Indiana	1,395,000
Iowa	1,727,000
Kansas	18,313,000
Louisiana	190,000
Mexico	2,157,000
Minnesota	3,000
Missouri	9,217,000
Nebraska	1,837,000
New Mexico	502,000
Oklahoma	10,419,000
South Dakota	7,000
Wyoming	364,000
	67,958,000
From West Virginia	
To District of Columbia	1,129,000
Kentucky	3,757,000
Maryland	665,000
Ohio	50,925,000
Pennsylvania	29,387,000
Virginia	38,000
	85,901,000
From Wyoming	
To Colorado	1,000
Montana	1,020,000
Nebraska	147,000
Utah	2,449,000
	3,617,000
	332,538,000

Kansas Fields

(Continued from Page 45)

Pool, in Rice County. It was completed about five and one-half years ago with an initial production of approximately 1,200 bbls. daily. The oil was found in the chat formation and the well is now reported to be making around 230 bbls. daily. It has produced approximately 1,200,000 bbls. of oil to date.

Another test is drilling in the Welch Pool. Rogers & Wilhelm's No. 1 Rainet, NE cor. SE SW, Section 3-21-6w, found the chat at 3,408-12 feet where oil rose 3,000 feet in the hole in a short time. The owners plan to test the chat and if it fails to show all that is desired the hole will be drilled to the Viola lime, which is expected at about 300 feet deeper.

In Barton County Sinclair Prairie Oil Co.'s No. 1 Turgeon, C NE NW, Section 3-16-12w, is being rigged and expects to start drilling in a few days. The contract has been awarded to Tom Johnson and it is expected the Siliceous lime will be reached in about 45 days.

Other wildcat tests in Barton County include Elwell-Smith and others' No. 1 Wilson, C NW SW, Section 13-18-14w, which landed the 10-inch casing at 2,294 feet and is drilling deeper at 2,350 feet; Doherty and others' No. 1 Roesler, SW cor. NE, Section 11-18-11w, shut down at 1,975 feet; W. Rankin and others' No. 1 Sooey, C SW NE, Section 34-18-12w, a rig; Torrey and Feaster's No. 1 Berscheidt, NE cor. NW, Section 12-20-11w, drilling at 2,350 feet.

Skelly Oil Co.'s No. 2 Leisman, SW cor., Section 19-27-10w, Kingman County, found the top of the Kansas City lime at 3,312 feet and at 3,386-87 feet it made 2,000,000 feet of gas a day. At 3,396 feet it showed some oil, and at 3,423 feet it made 9,000,000 feet of gas a day. It was drilled to a total depth of 3,448 feet and flowed 96 bbls. of oil in 24 hours. The same company has made a location for No. 3 Leisman in the NW cor., Section 29-27-10w.

Ellsworth County

Leo Margan and others' No. 1 Andress, NE cor. SW, Section 3-17-8w, was abandoned at 3,400 feet.

Greenwood County

York State Oil Co.'s No. 1 Joy, SE cor., Section 11-23-11, is a rig. Gore and Phillips Petroleum Co.'s No. 3 Brothers, NW cor. SE NW NW, Section 35-23-11, was drilling at 500 feet. Sinclair Prairie Oil Co.'s No. 3 Davis, SE cor., Section 6-24-12, was spudding. Landon and others' No. 4 Smith, NW cor., Section 8-24-12, swabbed 100 bbls. from 1,729-45 feet. Same operators' No. 5 Smith, SE cor. SW NW, Section 8-24-12, was abandoned at 1,831 feet.

Kingman County

Skelly Oil Co.'s No. 3 Leisman, NW cor., Section 29-27-10w, is a location.

Leavenworth County

West and others' No. 1 Karb, C NW NE, Section 32-10-21, was abandoned at 1,288 feet.

McPherson County

Douglass and others' No. 1 Hall, SE cor., Section 33-19-2w, is a location. Shell Petroleum Corp.'s No. 5 Johnson, SE cor. SW, Section 35-19-3w, is a location. Lario Oil & Gas Co.'s No. 1 Neufeldt, SW cor. NW, Section 34-21-3w, is a rig. Spencer and others' No. 2 Neufeldt, SW cor. SE SE, Section 16-21-3w, (a) is a location. Same operators' No. 2 Neufeldt (b), NW cor. SW SE, Section 16-21-3w, is a location. W. C. McBride, Inc.'s No. 1 Neufeldt, NE cor. NW, Section 28-21-3w, an old well drilling deeper, flowed 300 bbls. from 3,128 feet. Mid-Kansas Oil & Gas Co.'s No. 2 Bridgens, SE cor. NW SW, Section 2-20-3w, was completed for 21,000,000 feet of gas per day from 3,025-32 feet. United Petroleum Co. and others' No. 1 Smith (b), in Section 29-19-1w, was completed for 270 bbls. of oil from 3,416-33 feet.

Rice County

Hipple & Liggett's No. 2 Rainet, SW cor. NE SE, Section 3-21-6w, is a location.

Rush County

Barnsdall Oil Co.'s No. 1 Schultz, SW cor., Section 3-19-16w, was abandoned at 3,880 feet.

Sedgwick County

Scroggins and others' No. 1 Bartnett, NW cor. SE NW NW, Section 35-27-1, was abandoned at 1,550 feet.

Independents Will Hold One Day Tulsa Session

The annual meeting of the Independent Petroleum Association of America will be held Monday, November 14, beginning at 10 a. m., in the Mayo Hotel at Tulsa.

The annual reports of President Wirt Franklin, Counsel Russell B. Brown, and Treasurer George A. Dye, will be presented. The president has also appointed committees on nominations, organization, and policy, finance and budget, audit, publicity and resolutions. These committees will meet and plan their work in advance so as to expedite business at this annual one-day meeting.

In order to save time and expense to members it is planned to take advantage of the American Petroleum Institute meeting which opens at Houston Tuesday, November 15. The Frisco and Katy Railroads are planning a special train, leaving Tulsa on Monday evening, November 14, at 6 o'clock, arriving in Houston early Tuesday morning. Fort Worth and North Texas cars will be attached to this train at Dallas. The independent meeting will adjourn in time to make this train. The schedule from east of the Mississippi will allow a full working day in Tulsa.

Japan Announces Project to Extract Oil From Coal

A new method of producing heavy oil, which is expected to revolutionize Japan's naval fuel supply, has been announced by the South Manchuria Railway.

After five years of experimentation, a cheap process of low temperature carbonization, by which 1 ton of heavy oil can be extracted from 2 tons of coal, has been perfected, it is said. The product is good fuel oil, the railway announced, and it is possible to crack it into gasoline.

The navy, which has been seeking new fuel sources independent of American, British and Dutch supplies, assisted in the experiments.

The chief source of the new fuel is expected to be the great Fushun open-cut coal mine in Manchuria, where coal at the pit-head costs less than 50 American cents a ton.

DOMESTIC EXPORTS OF PETROLEUM, REFINED PRODUCTS AND BENZOL

	Month of September 1931	Month of September 1932
Crude petroleum ..... Bbls.	2,296,457	2,112,892
Crude petroleum ..... $	1,510,275	2,162,787
Natural gasoline* ..... Bbls.	.....	83,848
Natural gasoline ..... $	.....	167,873
Total refined products ..... Bbls.	7,244,344	5,564,453
Total refined products ..... $	18,328,069	13,600,422
Gasoline and other light products ..... Bbls.	3,078,716	2,576,031
Gasoline and other light products ..... $	7,212,433	5,791,022
Illuminating oils ..... Bbls.	1,056,602	1,081,036
Illuminating oils ..... $	2,876,424	2,227,911
Gas and fuel oils ..... Bbls.	2,217,192	1,260,356
Gas and fuel oils ..... $	1,840,387	1,196,810
Lubricating and transformer oils ..... Bbls.	656,999	495,174
Lubricating and transformer oils ..... $	5,151,475	3,447,988
Lubricating greases ..... Lbs.	5,573,502	4,240,640
Lubricating greases ..... $	270,531	179,506
Paraffin ..... Lbs.	21,319,912	21,785,513
Paraffin ..... $	555,379	555,663
Petrolatum ..... Lbs.	813,705	959,766
Petrolatum ..... $	46,974	54,123
Asphalt ..... Long tons	18,274	8,551
Asphalt ..... $	337,251	140,399
Coke (petroleum) ..... Long tons	4,504	826
Coke (petroleum) ..... $	37,215	7,000
Shipments refined products to Puerto Rico, Alaska and Hawaii ..... Bbls.	590,339	153,823
Shipments crude oil to Puerto Rico, Alaska and Hawaii ..... Bbls.	.....	.....
Exports refined products from Puerto Rico, Alaska and Hawaii ..... Bbls.	5,908	3,551
Bunker oil for vessels in foreign trade ..... Bbls.	3,067,874	3,350,213
Exports benzol ..... Gals.	94,507	19,358

*Prior to January 1, 1932, included in refined gasoline.

PERSONAL PARAGRAPHS

Gerald Murphy of the Indian Territory Illuminating Oil Company, Bartlesville, Okla., was a recent visitor in Tulsa.

* * *

John T. Hayward, chief engineer, Barnsdall Oil Company, Tulsa, is on a field trip for his company in West Texas this week.

* * *

Joseph Elie, managing director of the LaSalle Petroleum Refinery Company, of Montreal, Canada, is visiting the New York market.

* * *

E. M. Clark, vice president and director of the Standard Oil Company (New Jersey), is in Europe on a combined business and pleasure trip.

* * *

John McPeak, secretary of the Union Oil Company of California, and A. W. Milford, assistant secretary, motored up to Palo Alto, Calif., recently.

* * *

Ralph B. Lloyd, president of the California Oil Producers Sales Agency, was the principal speaker at the Electric Club luncheon in Los Angeles, Calif., recently.

* * *

T. C. Skeen, Columbia Steel Tank Company, Kansas City, Mo., was in Tulsa for two days last week on one of his regular trips through the Mid-Continent fields.

* * *

V. C. Fuller, purchasing agent of the Gypsy Oil Company and the Gulf Pipe Line Company with headquarters in Tulsa, has returned from a business trip to Houston, Tex.

* * *

Fred Upchurch, assistant attorney general of Texas, has been appointed general attorney for the Independent Petroleum Association of Texas, resigning from the former position.

* * *

W. A. Williams, president of the Crown Central Petroleum Corporation for the past 10 years, has resigned. Henry Rosenberg, of Baltimore, Md., son-in-law of Louis Blaustein, was elected president.

* * *

G. Alexander, A. Slipper and C. Hansen recently returned to the Canadian geological survey camp at Burdett, Alberta, after spending four months in survey work in the Milk River district of southern Alberta.

* * *

Charles J. Wood, for the past several years a staff member of the Pennsylvania Grade Crude Oil Association, has resigned effective November 1, to take over the position of sales manager for the Henry P. Dunn Company, Inc., of Chicago.

* * *

C. L. Mohr, district geologist for the Indian Territory Illuminating Oil Company, San Angelo, Tex., addressed the West Texas Geological Society at its monthly meeting October 25, on "A Review of Various Interpretations of the Guadalupe Mountains," which lie in Culberson County, Texas, and Eddy County, New Mexico.

* * *

Kenneth A. Covell, well known petroleum engineer who has been with the Indian Territory Illuminating Oil Company in the Bartlesville, Okla., office for several years past has recently resigned to accept a position as assistant to R. H. Carr, chief engineer for the Pure Oil Company. Mr. Covell will move to Chicago to assume his new duties immediately.

* * *

Col. L. D. M. Baxter, manager of the Calgary & Edmonton Corporation, Ltd., of Winnipeg, Canada, has been appointed manager of the fuel department of Osler, Hammond & Nanton, Ltd., of Winnipeg. Colonel Baxter is a member of the Institute of Mining & Metallurgy and vice president of the Manitoba Chamber of Mines, as well as a member of the Oil and Gas Association of Alberta.

George H. Jaques, vice president of the Midwest Refining Company, has returned to Denver headquarters from an inspection of the company's properties in Kansas.

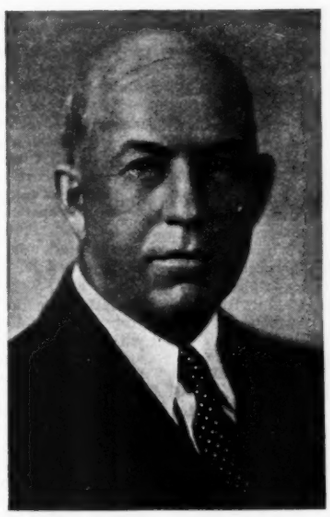
* * *

J. Dorian Curtin, Mid-Continent Petroleum Corporation, Tulsa, has been transferred from the southern division to the general sales office as special representative of Robert McDowell & Douglas Wixon.

* * *

Arch T. Watson, formerly district superintendent of production for the Prairie Oil & Gas Company with headquarters at Augusta, Kans., is now general production superintendent for Tom C. Johnson, an independent producer in Kansas.

Men of the Industry



GEORGE W. SHOWALTER

George W. Showalter, division superintendent for the Mid-Continent Petroleum Corporation, was a farm boy of 16 in Indiana, when he found out that some oil field workers received $125 a month. He wondered if he couldn't get a job like that some day. His opportunity came two years later in 1899, when a pumper was needed on a lease near Keystone, Ind., and young George qualified. He worked as pumper, roustabout and tooldresser in the Keystone and Montpelier districts of Indiana for nine years.

In 1908 young Showalter went to Oklahoma and put in four years roustabouting and pumping in the Glenpool Field under John Bennett, superintendent for the Prairie Oil & Gas Company. In 1912 he was transferred to the new Cushing Field as farm foreman. Three years later he went to work for the Carter Oil Company in Oilton, Okla., under George O. Moody. Later Mr. Moody began developing the Hill properties in the south end of the Cushing Field for the Cosden Oil & Gas Company. In 1916 Mr. Showalter joined him at an advance in pay which brought his monthly salary check above the figure that had lured him as a farm boy back in Indiana.

After two years as district foreman in the Cushing Field Mr. Showalter was placed in charge of properties south of the Arkansas River and west of the Texas line of the Frisco Railroad. He has held that position since then, residing in Tulsa. In the meantime the Cosden company had become the Mid-Continent Petroleum Corporation.

R. B. Harrington, of Huntington, W. Va., geologist with the Dokenva Gas Corporation, is now in Richmond, Ky.

* * *

J. Edgar Pew, executive vice president of the Sun Oil Company, Philadelphia, Pa., has been spending some time in Texas on business.

* * *

Harry F. Wright, consulting petroleum engineer and geologist, Tulsa, has been in the East Texas fields for the past two weeks on professional work.

* * *

E. A. Landreth, president of the Landreth Production Company, Fort Worth, Tex., has been nominated as a member of the board of education of that city.

* * *

C. C. Rae, petroleum engineer, Skelly Oil Company, Tulsa, has been away from his office on field work taking him to Kansas and the Panhandle of Texas.

* * *

W. S. Farish, president of the Humble Oil & Refining Company, and a director of the Standard Oil Company (New Jersey), was visiting New York headquarters last week.

* * *

L. A. Williford, of the Macmillan Petroleum Corporation of California, presided as chairman of the evening at a recent meeting of the Los Angeles Petroleum Accountants Society.

* * *

H. K. Browning, director of oil country sales, A. M. Byers Company, Pittsburgh, Pa., was in the company's Houston, Tex., office last week on a short trip and returned to Pittsburgh by plane.

* * *

J. B. Durkee, sales representative for the A. M. Byers Company, has been transferred from Dallas, Tex., to Tulsa. The Byers company will maintain an office in Tulsa under the district office in St. Louis, Mo.

* * *

M. B. Arick, of McCamey, E. Russell Lloyd of Midland, and C. L. Mohr of San Angelo, Tex., have been appointed to make arrangements for a field trip of the West Texas Geological Society to the Guadalupe Mountains on November 11, 12 and 13.

* * *

Charles M. Rath, consulting geologist, of Denver, Colo., and for many years with the Midwest Refining Company, received serious injuries while picking apples near Golden. He fell from the tree, catching his chin on a limb in his descent, receiving internal injuries and having a pelvis bone broken. He is in a Denver hospital.

* * *

Thomas Midgley, Jr., executive of the Ethyl Gasoline Corporation, is one of the 10 prominent scientists nominated for president of the American Chemical Society. The members of the society vote on these and the names of the four receiving the largest number of votes are placed on the ballot for election by the council.

* * *

A group of officials of Imperial Oil, Ltd., is making a tour of the Canadian West in connection with marketing operations. The party includes John McNeil of Toronto, director in charge of marketing; A. E. Halverson, of Toronto, general sales manager; I. H. Griffith, of Calgary, western representative, and G. H. Teagle, manager of the Calgary division.

* * *

Dr. Theodore A. Link, of Calgary, chief geologist in western Canada for Imperial Oil, Ltd., has been appointed to take charge of the designing and construction of models and exhibits in geology for the International Exposition to be held at Chicago in 1933. The display is to be under the auspices of the American Petroleum Institute. Doctor Link has been granted leave of absence by Imperial Oil, Ltd., while he takes charge of the display for the Institute and will leave Calgary for Chicago about November 1.

FIELD PROBLEMS FROM READERS

Edited by Thomas F. Smiley

This department is conducted in order that men connected with the drilling, producing or transporting branches of the petroleum industry may obtain aid in solving problems that confront them in their work. Readers are invited to send questions freely. These questions will be placed in the hands of persons capable of answering them authoritatively, and the answers, based on the best available information, will be published.

Each question should give as much detail as possible, especially if it involves depth of sands, types of sands and operations on adjoining or nearby properties. The source of questions will be considered confidential, and only the initials of the sender will be published. Questions involving patented processes, intricate formulas or estimates of cost cannot be answered. If an immediate answer is important, one will be given by mail when the writer requests it.

In this connection, The Oil and Gas Journal will be glad to publish articles from field men who have devised new methods or improved old ones.

Thinks Preservation of Well Log Should Be Made Mandatory

I read with interest your answer to the question by D. T. T. regarding the advisability of drilling near an old well that had been plugged and that nobody knew anything about. Several times in recent years I have been up against about the same sort of proposition. If I had been able to find out something definite concerning the history of some well that had been drilled and abandoned many years earlier I would have been able to decide intelligently what to do. Has this practice of keeping no drilling logs been very general? Is it still done? If it is, it seems to me some action ought to be taken, for it would be quite possible to lose thousands of dollars in useless drilling through not having any record of wells already drilled in the district —R. R. T.

The loose practice to which you refer belonged chiefly to the early period of oil development, when the enormous value of drilling records was not realized. Even today, when the importance of such records is recognized, it is probable that the situation would be improved if there were more care and a greater degree of uniformity among the various oil-producing states in the method of obtaining and preserving these records. Information at hand indicates that most of the different oil-producing states require that logs of all wells drilled be filed with the state. In Texas the producer files an "intention to drill." Virtually all oil producers now keep at least a driller's log of each well and in the case of the large companies which maintain geological departments complete geological records are kept. Through failure to adopt strict regulations regarding the preservation of well logs in the earlier years of oil and gas development there is said to be danger of losing many valuable logs in some states.

Discussing this subject, J. G. Montgomery, Jr., superintendent of the United Natural Gas Co. in Oil City, Pa., says:

"It is estimated that a total of 400,000 wells have been drilled in Pennsylvania, and of this number approximately 50 per cent are now represented by nothing more than so many holes in the ground. The date, depth, formations, production, and in cases of abandoned wells, even the locations may have been completely lost. To attempt to estimate the amount of money that has been spent in prospecting for oil and gas in areas where this information has not been kept is a difficult task. This situation has resulted in the testing a second and third time to obtain the same data that was available but not recorded in the first tests.

"Recently a stock company leased a tract of land which had been represented as having never been drilled upon. On the day when this company's first test was to be drilled in, one of the stockholders who was present for the event accidentally discovered an old abandoned hole nearby. Upon investigations, the locations of 17 other old holes were discovered on the property and instead of being virgin oil and gas territory, the company was in reality drilling on a depleted or barren tract. Thus, because of the lack of proper location records, another sum of money had been wasted. Regardless of the results of the drilling, the location plat should never be destroyed. It may seem inexcusable for a company to have such an experience, but after a section is wooded or cultivated or improved, the surface evidence of a hole is easily lost.

"In drilling a well in the early days the operator was usually seeking to encounter a certain oil or gas horizon and in reaching the goal little attention was given to the other formations passed through. This situation exists even today, especially in places where the production is obtained mainly from one horizon. Of the great number of wells in the Bradford oil pool, it is surprising to discover what a small proportion have recorded the red rock, pink rock and other formations above the Bradford sand."

Fluid Production Measured at the Well by Installing Meters

I would like some information regarding the practice of installing meters at the wells to measure the flow as it goes straight to the stock tank, which I understand is adopted in some fields. What kind of meter is needed and what are the advantages?—G. N. E.

Necessity for gauge tanks is eliminated by using meters which measure the flow at the well, discharging directly into stock tanks, it is pointed out by H. A. Brett, of the Union Oil Co. of California, who provides the information in reply to your question. Mr. Brett says that when selecting a meter for a given well, it is important that sufficient capacity be provided to handle the maximum production from the well in the event that the well produces by heads. A gas eliminator, which is in reality a miniature gas trap, should be set immediately ahead of the meter to insure the delivery of gas-free fluid to the meter; otherwise, the recorded flow will be in error. A by-pass around the meter should be provided so that repairs or replacements may be made without shutting down the well, and a pop valve should also be installed ahead of the meter as a protection against excessive pressure on the lead line and trap in the event that the meter becomes inoperative for any reason or a discharge valve closes in the gathering system.

The chief advantages of the meter installation are the elimination of the first cost and maintenance of gauge tanks without eliminating individual well records, and all the production from one lease is pooled and held in a few tanks located at some convenient point. The number and size of these stock tanks will, of course, depend on the amount of production to be handled and on the shipping facilities. Monetary savings will be directly proportional to the number of wells; the more wells the greater the saving. Other advantages are the ease of reporting production as the meters are graduated to read in barrels directly; and, because of the pressure of sampling devices with which these meters are equipped, it is possible to obtain a fairly representative lead line sample as a few drops are secured at each pulsation of the meter.

These meters are obtainable, either with or without an automatic device, to compensate for temperature changes, and are known as thermometric or volumetric meters, respectively. Volumetric meters, when adjusted to agree with the gauge tank strapping, have proven entirely satisfactory.

Why Was It Called That?

PRAIRIE PLAINS MONOCLINE

"Prairie Plains monocline" is the name applied to the west and northwest dipping strata which lie in Kansas and northern Oklahoma. The rate of dip on the monocline is about 25 to 30 feet per mile. On the eastern border of the monocline the Ozark Dome and its extensions north and south have exerted some influence on it. Essentially, however, the monocline must be interpreted as the result of a slightly greater tendency to subsidence in the area west of the Ozark Dome than in the region of the dome itself. The name, first used by G. I. Adams in 1900, has been used by geologists since then. It was suggested by the fact that the dome lies in what really are prairie plains.

Can Aerial Geology Do Any More Than Show Favorable Areas?

Answering a question concerning the relationship between geology and aerial photography in The Oil and Gas Journal of August 18, 1932, you speak of the belief held by some persons that this aerial geology may do what geologists and geophysicists never have pretended to do, namely, point out not merely areas favorable for deposits of petroleum, but areas where the oil actually lies. I am interested in knowing how it is expected to do this.—P. E. G.

The belief to which you refer, entertained probably by few persons, is based on the reported identification of certain surface characteristics found to be common to all, or most all, areas underlaid by oil or gas sands, but not found in areas later proved to be unproductive. From deductions made in the study of aerial surveys and photographs of scores of productive fields and known unproductive spots, the theory has been evolved that nature leaves certain clues to lead man to its buried mineral treasures.

These clues, if such they are, may be difficult to discern in ordinary ground work as they usually are recognizable only when seen collectively in an air view of an area as a whole. Even then, except to one especially trained in aerial geology, they might have no particular significance as the answer to the phenomena is said to be found in the interpretation of chemical, rather than geological, action.

Illustration of this theory is found in aerial pictures of two Gulf Coast areas, both overlying known salt domes, one of which has been productive and is one of the coast's more important fields while the other has had scores of tests drilled on or around it in the past 20 or 25 years of development without the finding of commercial production.

The picture of the productive dome (Pierce Junction) presents a spotted condition which is said to characterize every aerial photograph of an area which the drill has proved productive of oil or gas, but never found in pictures of areas thus far found to be unproductive.

This peculiar marking has been noted in many so far undrilled areas, and, if the theory is correct that this marking is indicative of underlying oil and gas, these prospective fields already noted would be sufficient to supply the world with petroleum for years to come. On the other hand, there are well-known undeveloped structures and salt domes and prospects which now are looked upon as being promising for oil and gas but on or around which the peculiar spotted markings are not evident, and, according to the new theory of aerial geology as advanced by some, the expense of drilling those areas might as well be saved.

The spotted condition said to overlie oil and gas accumulations is interpreted by this theory to represent bleached portions of the surface soil surrounding points of escapement, or seepages. In this it is recognized that the centralization of the spots of escape is at the highest point to which the accumulations of oil and gas can be driven by their hydrostatic head as it is there that the greatest pressure is exerted.

The determination of existing fields, if this is possible by the theory under discussion rests largely on the art of proper interpretation of the peculiar markings as they are related to surrounding geological features and to proper identification of their nature and cause.

NEW AND IMPROVED EQUIPMENT

Lawrence Electropump Is Adapted for Wide Service

The Lawrence vortex Type E electropump, announced by the Lawrence Pump & Engine Co., Lawrence, Mass., is designed for transfer of oil and other liquids, circulating hot or cold water or brine, for booster service and water supply systems, low pressure boiler feeding, condensate returns and general service. It is offered by the company as a compact, efficient centrifugal pumping unit for small and moderate capacities for operation against heads up to 150 feet or 65 pounds pressure in a single-stage unit, and twice the head or pressure when furnished with two-stage unit in series.

The ball-bearing motor and pump are

built into one unit, and the number of rotating parts is reduced to a minimum. Couplings are eliminated and special foundation is not required. This construction makes a self-contained, light, easily portable unit requiring small space which can be operated equally well in vertical, horizontal, or inclined position.

The unit consists of a single-stage, single-suction, fully bronze fitted (standard construction) pump with close-coupled motor. The impeller is of the enclosed type and is mounted, keyed, and locked on the extension of the motor shaft.

The pump casing is of the volute type and is regularly made of close-grained cast iron, but is also furnished when specified of nickel-iron, bronze, monel metal, and other suitable alloys. The volute and frame are made with counterbored fit which prevents any misalignment of the unit.

Stud bolts in the pump casing are accurately spaced to allow the discharge nozzle to be placed in any one of four positions of 90 degrees each. Discharge and suction nozzles on 1-inch and 1½-inch pumps are tapped for standard pipe. The 2-inch pump is provided with standard flanged connections, drilled to 125 pounds American standard.

Simplicity and Lightness Mark Shand & Jurs Valve

The Shand & Jurs Co., Berkeley, Calif., has announced a new gate valve which embodies simplicity, light weight and interchangeable features. The bronze disc is installed through the flow passage, doing away with the bolted or threaded bonnet. Two sets of opposed threads operate to lift the disc twice as fast as the stem and with half as many turns as in ordinary valves. The disc is of the self-aligning type and the disc seats are integral with the flanged or threaded ends. Lapping of seats is easily accomplished.

The valve weighs 6 pounds in aluminum and 13 pounds in bronze construction in the 2½-inch size. Many connection arrangements can be made with the same valve by means of the interchangeable feature. For example, both ends can be flanged, or both threaded with either male or female threads. One end can have flange while the other has standard male fire threads with chained cap.

Notes About Trade Literature

The Gaso Pump & Burner Manufacturing Co., First Street and Lansing Avenue, Tulsa, announces publication of its bulletin No. 10 which covers a duplex piston horizontal fully enclosed type power pump that can be utilized for field service or on small pipe lines. Bulletins 7, 8 and 9 also illustrate and describe the company's latest additions to the Gaso line of all Timken bearing enclosed type power pumps for both high and low pressure.

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The Caterpillar Tractor Co., Peoria, Ill., has issued a 22-page booklet telling about the Caterpillar Diesel engine.

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The General Refractories Co., Philadelphia, Pa., has available interesting bulletins and folders on Carbex silicon carbide brick, describing in detail the characteristics of this brick.

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The American Askania Corp., M. and M. Building, Houston, Tex., has a pamphlet on a new integrometer for geophysical work, the purpose of which is to determine accurately and rapidly gradients of gravity and other gravity data by simple integration of a cross section through an interesting area.

Catalog No. 34, descriptive of Innerseal fittings, a new product for commercial plumbing, may be obtained from the Parker Appliance Co., Cleveland, Ohio.

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The Taylor Forge & Pipe Works, Chicago, announces the second issue of its booklet "Taylor Forge," treating in general the subject of welding and discussing particularly the application of Taylor Forge seamless steel fittings.

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Following are new publications recently released by the Worthington Pump & Machinery Corp., Harrison, N. J.: "Gas Engines," 6-page bulletin S-550-S4 describing horizontal 4-cycle double-acting 30-inch stroke engines; "Centrifugal Pumps Arranged for Automatic Priming," 4-page bulletin W-323-B1 describing construction and application of new line of pumps equipped with "Hytor" priming unit; "Deep Well Pumps," vertical rotating shaft type, 4-page bulletin D-450-S9 covering wells up to 6 inches; 4-page bulletin D-450-S10 covering 6-inch, 8-inch and 10-inch wells; 4-page bulletin D-450-S11 covering 12-inch, 14-inch, 16-inch and 20-inch wells; "Sump Pump," vertical rotating shaft type, 4-page bulletin D-450-S2A.

Among the Equipment Houses

Orders for 4,000,000 pounds of copper, a quantity far in excess of current business demand, have been placed by the Westinghouse Electric & Manufacturing Co., according to F. A. Merrick, president of the company. This large scale commitment at this time, according to Mr. Merrick, is influenced by sound economic factors, a firm belief that business actually has turned the corner and as a step to stimulate employment in the basic industries.

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By vote of the employes' representatives of the Schenectady works of the General Electric Co., the 2 per cent deduction from wages in behalf of unemployment emergency relief will continue through the coming winter. The company contributes dollar for dollar with the employes.

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The Jeffrey Manufacturing Co., Columbus, Ohio, has moved its southwestern district office from Houston to Dallas, Tex. Tom P. Burke is district manager. His Dallas address is 3420 University Boulevard. With the removal of offices the territory supervised by Mr. Burke has been enlarged.

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Sales billed by the General Electric Co. for the first nine months of 1932 amounted to $113,049,474, compared with $206,138,967 for the corresponding period last year, a decrease of 45 per cent.

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Fred C. Archer has been made manager of the Philadelphia district by the Lincoln Electric Co., Cleveland, Ohio. Mr. Archer formerly was president of the Fred C. Archer Co., which he organized in 1925.

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Foote Brothers Gear & Machine Co., Chicago, has appointed J. L. Kilroy, 114 Bauer Avenue, Louisville, as IXL representative in Kentucky and all cities on the Ohio River in Indiana and Ohio, with the exception of Newport and Ashland, which are covered by the Ohio representative.

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The National Equipment Corp., Milwaukee, Wis., has appointed Carl S. Wagner general sales manager. After graduating from the University of Michigan in 1907 Mr. Wagner was employed successively by the American Locomotive Co. and the Insley Manufacturing Co., and after that was connected with the construction equipment industry.

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Col. George M. Morrow, Jr., has been elected president of the Goslin-Birmingham Manufacturing Co., Inc., of Birmingham, Ala., to succeed the late Julius Goslin. Colonel Morrow was vice president in charge of the company's two plants in Birmingham. He is a graduate of West Point and was lieutenant colonel of Fifty-sixth F. H. in the World War.

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The Universal Valve & Fittings Co., Cleveland, Ohio, has been appointed agent in that district for Kieley & Mueller, Inc., of New York, manufacturers of pressure control devices and allied specialties.

NEW ROTARY CHAIN ANNOUNCED

Development of a new rotary sprocket chain is announced by Link-Belt Co., Indianapolis, Ind. It is to be known as the Link-Belt Red-Hed rotary chain and identified by its red pin head. The new chain conforms to the established A.P.I. dimensional standards, and has been developed as a companion to the company's stronger Hyper rotary chain. Red-Hed chain is made in two sizes: SS-40+ (plus), A.P.I. 3, 45,000 pounds ultimate strength, and SS-124+ (plus), A.P.I. 4, 100,000 pounds ultimate strength.

Men Well Known in the Equipment Field

FRANK CHAMPION

Frank Champion, recently made general sales manager for Byron Jackson Co., is a graduate engineer, and has had several years practical experience in both drilling and production work. Following this field service, he became sales manager for the Pacific Wire Rope Co., and later served in a similar capacity for the Lorraine Corp.

From 1929 until early in 1932, as a member of the firm of Champion & Barber, which introduced and marketed several new specialties, Mr. Champion established a wide acquaintance among both oil country operators and officials. Upon dissolution of the firm Mr. Champion became identified with the BJ organization. His appointment as general sales manager brings under his direction all export, Mid-Continent and California sales activities for the oil tool division of Byron Jackson Co.

Cleaning Agent for Oil Industry Is Introduced

Me-Terj-Ol, a special oil industry cleaner, is a highly concentrated cleaning agent for steel drums, tank cars, storage tanks, preheaters, heat exchangers, pipe lines, tank steamers, oily floors, valves and metal parts. The manufacturers say it is instantly soluble and miscible in water and that it reaches its maximum detergency at a temperature of 125° F. It is said this cleaner also mixes readily with salt water.

The manufacturers further say that this cleaning agent will go the full length of the steam flow in a vaporizing system and that it will not cause a burn if accidentally gotten on the skin. It is made by the Me-Terj-Ol Products, Inc., Empire State Building, New York.

The bronze welding rod booklet published by the Linde Air Products Co., New York, describes the physical and welding characteristics of a new bronze welding rod with which it is possible to obtain tensile strengths in joining steel of between 56,000 and 60,000 pounds per square inch and ductility in excess of 30 per cent.

Oklahoma-Kansas and Eastern Monthly Pipe Line Report

OKLAHOMA-KANSAS
Pipe Line Statement for August Runs

Company—	Month (bbls.)	Dly. av. (bbls.)
Gulf P. L. Co.	1,601,559	51,663
Texas P. L. Co.	652,307	21,042
Empire P. L. Co.	1,806,314	58,268
Magnolia P. L. Co.	1,098,020	35,420
Cosden P. L. Co.	571,239	18,427
Stanolind P. L. So.*	2,424,200	78,200
Oklahoma P. L. Co.	1,830,581	59,051
Other lines*	5,805,618	187,278
Total August	15,789,838	509,349
Total July	16,032,104	517,165
Difference	242,266	7,816

Shipments

Gulf P. L. Co.	1,565,423	50,498
Texas P. L. Co.	975,902	31,481
Empire P. L. Co.	3,871,100	66,810
Magnolia P. L. Co.	1,253,728	40,443
Cosden P. L. Co.	413,191	13,780
Stanolind P. L. Co.*	3,518,500	113,500
Oklahoma P. L. Co.	2,075,143	66,940
Other lines	5,828,000	188,000
Total August	17,900,987	577,452
Total July	18,004,450	580,789
Difference	103,463	3,337

Stocks

Prairie O. & G. Co.*	33,797,000
Gulf P. L. and Gypsy Oil Co.	7,527,620
The Texas Company	2,282,841
Empire P. L. Co.	4,931,924
Mid-Continent Petroleum Corp.	2,412,805
Stanolind Crude Oil Pur. Co.*	15,353,000
Magnolia Petroleum Co.	7,717,554
Oklahoma P. L. Co.	1,778,426
Carter Oil Co.	2,903,778
Other lines	16,227,000
Total August	94,931,948
Total July	96,594,946
Difference	1,662,998

*Estimated. Stanolind Pipe Line Co. shipments include Texas crude oil.

EASTERN PIPE LINE REPORT FOR MONTH OF SEPTEMBER

Runs From Wells

In the following table will be found the regular receipts from wells by various pipe lines in New York, Pennsylvania, West Virginia, Ohio, Kentucky, Illinois, Indiana and Michigan for August and September:

	Aug. '32	Sept. '32
Nat. Transit	275,750.53	178,519.29
S. W. Pa. P. L.	62,129.52	56,201.83
Eureka P. L.	266,577.80	240,206.60
Buckeye P. L. (Macksburg)	237,716.09	231,835.91
Buckeye P. L. (Cleveland)	11,208.49	11,767.76
Buckeye P. L. (Lima, etc.)	81,587.39	76,931.63
Indiana P. L.	2,458.46	1,875.85
N. Y. Transit	39,020.34	36,110.70
Tide Water P. L.	25,567.98	25,049.71
Pure Oil	516,376.91	573,164.71
Stoll Oil Ref.	50,898.63	47,822.45
Bradford Tran.	381,997.45	348,422.63
Ashland Ref.	146,696.38	134,802.15
Total	2,097,974.97	1,962,711.22
Daily average	67,676.61	65,423.71

Petroleum Deliveries

The following tables exhibit the shipments or regular deliveries of various pipe lines in New York, Pennsylvania, West Virginia, Ohio, Kentucky and Indiana for August and September:

	Aug. '32	Sept. '32
Nat. Transit	534,240.67	464,338.13
S. W. Pa. P. L.	426,871.06	265,205.45
Eureka P. L.	252,456.47	284,993.10
Buckeye P. L. (Macksburg)	249,820.07	235,046.28
Buckeye P. L. (Cleveland)	1,953.72	1,897.36
Buckeye P. L. (Lima, etc.)	1,472,333.62	1,324,145.52
Indiana P. L.	886,983.80	872,943.02
Southern P. L.	69,501.52	17,091.06
N. Y. Transit	179,437.69	189,326.01
Northern P. L.	24,426.40	699.20
Tide Water P. L.	391,155.65	364,794.61
Pure Oil	638,907.47	587,596.34
Bradford Tran.	441,852.71	266,778.24
Tuscarora Dev.	203,088.81	190,874.46
Total	5,822,029.66	5,115,727.78
Daily average	187,839.66	170,524.26

Gross Stocks

The gross stocks held by various pipe lines in the oil producing sections of New York, Pennsylvania, West Virginia, Ohio, Indiana and Kentucky at the close of August and September:

	Aug. '32	Sept. '32
Nat. Transit	685,167.99	711,383.53
S. W. Pa. P. L.	549,692.76	461,386.32
Eureka P. L.	1,004,657.06	1,050,276.49
Buckeye P. L. (Macksburg)	289,650.01	305,038.36
Buckeye P. L. (Cleveland)	52,664.82	37,278.62
Buckeye P. L. (Lima, etc.)	2,989,681.41	2,659,020.94
Indiana P. L.	490,709.25	544,686.38
Southern P. L.	236,712.22	156,396.24
N. Y. Transit	92,371.56	97,321.43
Northern P. L.	235,956.96	260,030.35
Tide Water P. L.	728,922.28	632,072.55
Pure Oil	575,085.28	599,768.13
Tuscarora	2,723.09	8,918.22
Bradford Tran.	204,681.76	271,844.16
Total	8,128,576.45	7,895,421.72
Decrease	48,380.43	233,154.73

Grades of Oil

The following table shows the amount of the different grades of oil held by the eastern pipe lines at the close of August and September showing gross stocks of the above fields:

	Aug. '32	Sept. '32
Pennsylvania	2,998,082.78	3,107,734.71
Lima	475,348.21	471,201.62
Kentucky	10,312.03	9,685.01
Mid-Continent	4,124,644.74	3,789,068.93
Illinois	21,067.44	6,857.75
Michigan	499,121.25	510,873.70
Total	8,128,576.45	7,895,421.72

Daily Average Runs

The following table shows the daily average runs of the Pennsylvania, Lima and Kentucky oil fields for the past four years:

	1929	1930	1931	1932
Jan.	51,749	75,907	53,939	53,501
Feb.	51,833	79,256	55,163	55,498
Mar.	54,252	76,688	54,331	57,199
April	55,444	84,536	54,914	57,348
May	59,902	70,546	53,344	59,105
June	58,333	75,430	54,110	64,371
July	66,087	68,921	50,723	63,402
Aug.	66,087	54,291	51,503	67,676
Sept.	67,315	56,595	61,345	65,423
Oct.	76,093	58,179	65,595	.....
Nov.	74,831	52,332	59,819	.....
Dec.	74,561	53,999	61,835	.....

Daily Average Shipments

The following table gives daily average shipments from the Pennsylvania, Lima and other fields for the past four years:

	1929	1930	1931	1932
Jan.	165,721	217,623	175,369	186,551
Feb.	159,387	224,355	183,494	169,856
Mar.	161,474	228,846	189,508	188,793
April	169,737	241,845	191,450	202,036
May	184,281	248,383	199,247	201,404
June	185,404	234,401	221,155	201,632
July	194,763	207,094	211,632	202,859
Aug.	194,946	205,506	224,166	187,839
Sept.	201,214	193,999	217,537	170,524
Oct.	191,367	157,675	210,831	.....
Nov.	202,742	146,638	196,425	.....
Dec.	186,257	143,001	176,241	.....

Gross Stocks

In the following table will be found the gross stocks of the various lines of the Pennsylvania, Lima and Kentucky oil fields, including oil received from other lines at the close of each month for the past three years:

	1930	1931	1932
Jan.	12,220,045	11,831,092	9,023,914
Feb.	12,991,561	11,506,489	8,974,350
Mar.	13,247,217	11,012,162	8,802,193
April	13,233,961	11,044,481	8,908,661
May	13,052,953	10,728,239	8,835,726
June	13,396,855	9,903,349	8,732,724
July	13,268,562	9,569,849	8,176,956
Aug.	13,047,851	9,192,457	8,128,576
Sept.	12,812,018	8,492,431	7,895,421
Oct.	12,437,553	8,417,694	.....
Nov.	11,851,380	8,830,386	.....
Dec.	11,751,953	9,119,032	.....

The Illinois Field

The following table gives the report of the Illinois Pipe Line Co. in Illinois:

Gross stocks, October 1	536,573.88
Runs from wells	411,479.29
Other receipts	153,016.81
Regular deliveries	303,841.70
Other deliveries	195,777.44

The amount of Illinois oil run by the Tide Water Pipe Co. in September was 25,049.71 bbls. Deliveries were 26,152.69 bbls. Adding these figures to those of the Illinois Pipe Line Co. makes the runs and deliveries as follows:

	Runs	Deliveries
1932—		
September	436,529.00	329,994.39
1931—		
January	468,429.04	669,573.19
February	429,284.54	461,262.85
March	424,638.23	356,663.26
April	421,814.98	282,532.65
May	433,231.80	322,513.95
June	510,805.78	320,258.13
July	520,009.38	289,219.05
August	476,623.56	393,231.06
September	492,183.83	323,912.50
October	498,124.13	325,834.95
November	470,302.63	281,258.48
December	515,771.28	306,623.19
1932—		
January	500,177.12	246,634.10
February	482,561.50	186,010.30
March	585,538.70	270,617.75
April	461,920.92	285,817.98
May	521,884.64	279,859.88
June	501,878.26	263,703.70
July	466,635.89	284,537.18
August	476,095.53	307,325.89

Tide Water Pipe Co., Ltd., also delivered in September, 89,436.18 bbls. Oklahoma oil.

Average Daily Imports of Crude and Refined Oil at Principal United States Ports

Average barrels per day in 1931-32—	ATLANTIC PORTS: Baltimore	Boston	New York	Philadelphia	Others	Total	GULF COAST PORTS: Galveston	New Orleans, Baton Rouge	Port Arthur, Sabine Pass	Tampa	Total	Total all ports
October	53,710	14,484	100,774	26,742	40,645	236,355	6,097	6,871	2,097	1,838	16,903	253,258
November	48,033	28,800	51,667	28,600	12,967	170,067	3,933	10,833	3,033	1,367	19,166	189,293
December	29,258	16,806	121,807	31,645	34,258	224,774	1,968	4,355	.....	.....	6,323	231,097
1932—												
January	19,161	8,161	104,065	24,194	34,903	190,484	4,871	7,226	2,096	1,484	15,677	206,161
February	32,483	16,517	128,483	28,863	34,552	240,897	2,034	5,207	4,310	1,379	12,930	253,827
March	25,806	10,516	167,806	38,677	48,129	290,935	5,936	39,774	.....	1,516	47,226	338,161
April	37,167	18,467	158,233	38,733	39,400	292,000	6,767	44,600	2,167	3,333	54,867	346,867
May	31,161	2,065	170,226	50,774	14,935	269,161	903	710	4,194	1,516	7,323	276,484
June	30,900	11,700	199,300	22,733	29,900	294,533	.....	.....	12,867	.....	12,867	307,400
July	2,613	2,161	62,968	14,935	2,129	84,806	.....	.....	.....	.....	.....	84,806
August	3,323	2,161	72,678	25,613	2,098	105,871	.....	.....	.....	.....	.....	105,871
September	5,100	2,200	57,900	12,167	10,066	87,433	.....	.....	.....	.....	.....	87,433

Average Daily Receipts of California Crude and Refined Oil at Atlantic and Gulf Ports

Average barrels per day in 1931-32—	ATLANTIC PORTS: Baltimore	Boston	New York	Philadelphia	Others	Total	GULF COAST PORTS: Galveston	New Orleans, Baton Rouge	Port Arthur, Sabine Pass	Tampa	Total	Total all ports
October	2,355	1,129	19,290	16,709	9,323	48,806	.....	.....	.....	.....	3,323	52,129
November	1,000	.....	22,800	11,567	.....	35,367	.....	.....	.....	.....	3,366	38,733
December	3,161	.....	22,484	8,839	6,032	40,516	.....	.....	.....	.....	7,742	48,258
1932—												
January	3,871	1,710	14,483	3,774	5,710	29,548	.....	.....	.....	.....	.....	29,548
February	3,069	.....	9,133	4,862	.....	17,034	.....	.....	.....	.....	2,483	19,517
March	1,516	.....	6,065	.....	.....	7,581	.....	.....	.....	.....	.....	7,581
April	3,500	.....	19,233	3,867	4,833	31,532	.....	.....	.....	.....	.....	31,532
May	2,161	.....	15,226	18,774	3,871	40,032	.....	.....	.....	.....	.....	40,032
June	2,500	.....	17,333	3,933	833	24,600	.....	.....	.....	.....	.....	24,600
July	2,323	.....	23,226	8,677	8,935	42,161	.....	.....	.....	.....	.....	42,161
August	4,452	.....	22,484	7,548	7,677	42,161	.....	.....	.....	.....	.....	42,161
September	2,900	.....	5,000	11,633	7,967	27,500	.....	.....	.....	.....	.....	27,500

Gross Production of Crude Oil in the United States for 12 Months

(In Barrels of 42 Gallons)

		California	Oklahoma	Texas	Kansas	Arkansas	Louisiana	Rocky Mts.	Eastern	Total
1931—										
September:	Month	15,180,610	7,946,880	28,981,525	3,147,030	1,128,380	1,641,384	2,761,230	3,632,000	64,429,039
	Daily average	506,020	264,896	966,051	104,901	37,946	54,713	92,041	121,067	2,180,568
October:	Month	15,651,983	12,951,893	30,725,173	3,177,066	1,172,389	1,822,255	2,797,597	3,900,000	72,198,356
	Daily average	504,903	417,803	991,134	102,486	37,819	58,782	90,247	125,807	2,328,979
November:	Month	14,997,700	16,430,730	28,860,561	3,131,670	1,130,700	1,851,577	2,706,390	3,639,000	72,748,328
	Daily average	499,923	547,691	962,018	104,389	37,690	61,719	90,213	121,300	2,424,946
December:	Month	15,560,984	16,598,299	27,767,651	3,198,642	1,082,148	1,971,817	2,816,759	3,645,000	72,641,300
	Daily average	501,967	535,429	903,860	103,182	34,908	63,607	90,863	117,581	2,343,263
1932—										
January:	Month	15,532,141	13,664,149	26,409,838	3,170,587	1,101,616	1,792,398	2,444,164	3,566,000	67,680,893
	Daily average	501,037	440,779	851,930	102,277	35,536	57,819	78,844	115,032	2,183,255
February:	Month	14,616,862	11,806,190	23,858,375	2,838,839	1,008,562	1,617,087	2,420,224	3,294,000	61,460,139
	Daily average	504,030	407,110	822,703	97,891	34,778	55,762	83,456	113,586	2,119,315
March:	Month	15,575,915	12,998,796	26,162,647	3,042,929	1,062,897	1,703,145	2,617,392	3,552,000	66,716,721
	Daily average	502,449	419,316	813,956	98,159	34,287	54,942	84,432	114,613	2,152,152
April:	Month	15,524,444	12,718,020	26,362,851	2,974,080	1,048,620	1,858,957	2,525,940	3,684,000	66,696,912
	Daily average	517,481	423,934	878,762	99,136	34,954	61,965	84,168	122,800	2,223,200
May:	Month	15,575,741	13,169,420	27,328,472	3,038,930	1,064,602	2,012,701	2,600,682	3,809,000	68,599,549
	Daily average	502,443	424,820	881,564	98,030	34,342	64,926	83,893	122,871	2,212,899
June:	Month	14,118,970	12,767,220	26,161,092	2,837,179	1,032,970	1,857,433	2,416,680	3,699,000	64,870,554
	Daily average	455,451	425,241	872,036	94,573	34,099	61,914	80,556	123,300	2,162,352
July:	Month	14,627,550	13,030,571	26,946,714	2,906,808	1,060,386	1,932,757	2,554,648	3,640,000	66,700,434
	Daily average	471,856	420,341	869,249	93,768	34,206	62,379	82,408	117,419	2,151,627
August:	Month	14,839,951	12,743,666	26,820,708	3,046,959	1,062,897	1,870,764	2,413,536	3,791,000	66,589,481
	Daily average	478,708	411,086	865,184	98,289	34,287	60,347	77,856	122,290	2,148,047
Total United States		181,802,851	156,815,844	326,385,607	36,510,719	12,956,167	21,933,275	31,074,343	43,852,000	811,330,806

Texas Gross Production Report for Second Quarter, 1932

Name—	Barrels	Value
A		
A. C. F. Oil Co., Wichita Falls	8,502.58	8,332.53
A. & M. Petroleum Co., El Paso	2,004.00	1,290.90
A. & P. Production Co., Houston	18,334.01	15,267.80
Aarco Oil & Gas Co., Baltimore, Md.	5,409.17	5,252.16
Abercrombie, J. S., Co., Houston	121,443.88	102,425.55
Abernathy & Kirkpatrick, Gladewater	24,244.02	23,828.55
Abraham, Earl, Bridgetown	1,402.16	1,356.07
Acme Oil Co., Longview	11,748.02	11,513.43
Acorn Oil Co., Beaumont	5,959.35	4,813.54
Ada Billie Oil Co., Balson	17,804.84	14,313.79
Adams & Cyr, Wichita Falls	330.64	304.78
Adams & Lyles, Lockhart	40,058.36	38,055.49
Adams, A. G., Overton	21,300.04	20,801.96
Adams, Harry, Co., Midland	21,846.58	13,828.38
Adams, T. C., Bethany, La.	11,908.04	11,669.89
Adams, Dr. Walter B., Wichita Falls	280.22	262.00
Adamson, Peter, Jr., Tulsa, Okla.	338.00	324.88
Adams & McGahey, Amarillo	16,569.20	14,453.76
Adams & Pornice, Amarillo	9,174.27	7,152.49
Alamo Oil Co., Brownwood	375.00	343.41
Alamosa Oil Co., Amarillo	4,822.15	3,002.04
Alaska Petroleum Co., Amarillo	1,238.32	957.32
Albany Oil Co., Breckenridge	1,477.34	1,416.80
Albany National Bank, Albany	445.33	402.31
Albright & Tidnell, Graham	1,063.83	679.52
Alco Royalty Corp., Tulsa, Okla.	26,081.11	25,518.05
Allbritain, F. J., Markley	839.37	739.38
Allen, W. L., (R. E. Thompson, receiver), Dallas	4,834.29	4,671.28
Allied Oil & Gas Co., Laredo	105,282.38	85,509.52
Alma Petroleum Corp., Oklahoma City, Okla.	41,621.02	40,457.41
Almeda Oil Corp., Luling	8,639.59	8,393.98
Alpine Oil & Development Co., Alpine	5,394.95	3,421.30
Amada Oil Co., Dallas	37,259.72	20,073.62
Ama-Gray Oil Co., Pampa	8,716.00	6,885.64
Amatex Petroleum Co., Tyler	11,430.56	11,201.96
Amerada Petroleum Corp., Tulsa, Okla.	355,939.46	308,655.07
American Liberty Oil Co., Dallas	201,383.25	151,802.65
American Maricaibo Co., New York, N. Y.	124,736.94	81,290.76
American Refining Properties, Wichita Falls	25,739.56	19,036.92
American Refining Properties (N. B. C.), Wichita Falls	525.13	522.85
American Refining Properties (M. J. B.), Wichita Falls	940.88	789.23
American Refining Properties (A. M. W.), Wichita Falls	1,426.11	1,369.43
American Refining Properties (W. M. P.), Wichita Falls	853.20	774.06
Amicable Life Insurance Co., Waco	337.00	134.80
Anchor Oil Co., Dallas	427.96	243.48
Anderson & Co., Fort Worth	21,529.98	21,099.35
Anderson, Daubert, et al, Olney	3,444.07	3,031.02
Anderson Drewery Corp., Cisco	4,520.00	4,420.52
Anderson, G. S., Fort Worth	5,236.70	5,131.98
Anderson, W. E., McCamey	3,388.77	2,202.70
Andrews Petroleum Corp., New York, N. Y.	2,860.65	2,338.67
Apollo Oil Co., San Angelo	5,010.46	3,373.34
Arab Gasoline Corp., Eastland	1,130.11	1,061.54
Arcadia Refining Co., Tyler	66,727.12	65,176.04
Archer, H. L., et al, Overton	5,998.90	5,624.22
Arco Oil Co., Wichita Falls	18,170.40	14,317.28
Ark Oil Co., Okmulgee, Okla.	10,938.95	10,719.96
Arkansas Drilling Co., Longview	7,619.00	6,099.56
Arkansas Fuel Oil Co., Shreveport, La.	635,283.79	619,102.29
Arkansas Louisiana Pipe Line Co., Shreveport, La.	1,369.68	1,313.63
Armstrong, W. J., Cisco	426.48	421.19
Arrow Drilling Co., Tulsa, Okla.	11,916.89	11,516.49
Arrow Refining Co., Fort Worth	5,595.62	5,418.38
Arrow Head Oil Co., Dallas	415.35	402.97
Art, J. L., Wichita Falls	255.57	255.57
Artex Oil Co., Wichita Falls	554.47	506.61
Aston Oil Co., Oklahoma City, Okla.	21,172.51	20,749.06
Atkinson Sandefer Oil Corp., Breckenridge	11,040.11	10,448.14
Atlantic Oil Producing Co., Dallas	1,143,248.65	1,040,997.07
Atlantic Oil Producing Co., Dallas	16,144.90	14,815.77
Atlantic Oil Producing Co., Dallas	16,144.90	14,815.77
Atlas Production Co., Wichita Falls	.....	1,131.81
B		
Badger Oil Co., Amarillo	14,094.86	12,403.47
Bagby, Logan H., trustee, Tyler	5,524.85	5,414.35
Bailey & Trimble, El Dorado, Ark.	16,588.40	15,997.17
Bailey, Carl W., Wichita Falls	5,416.91	5,292.67
Baker & Pardue, Breckenridge	13,061.38	11,474.72
Baker, Andy J., Zephyr	162.00	130.00
Baker, J. A., Breckenridge	612.13	538.77
Baker, James Blair, and C. F. Camp, trustees B lease, Wichita Falls	9,708.16	8,842.71
Baker, J. B., and C. F. Camp, trustees, C lease, Wichita Falls	687.94	642.11
Baker, J. B., Jr., F lease, Wichita Falls	2,035.07	1,814.52
Baker, Mollie B., and Fred R., Breckenridge	464.00	445.44
Baker, J. F., and H. E., Breckenridge	2,960.00	2,774.40
Baker, J. A., and Mollie, Breckenridge	4,590.00	4,260.60
Baldwin, F. C., et al, Inc., Fort Worth	4,514.61	4,259.10
Barbara Oil Co., Chicago, Ill.	1,660.96	1,523.17
Barkley & Meadows-W. T. Waggoner, Wichita Falls	2,848.76	2,637.24
Barnes, J. B., Electra	5,549.67	4,946.00
Barnsdall Oil Co., Tulsa, Okla.	426.89	582.99
Barnsdall Oil Co., Tulsa, Okla.	277,847.88	265,900.42
Barrett, Harry L., Ponca City, Okla.	10,639.71	10,624.92
Bass & Dillard, Wichita Falls	3,962.06	3,900.66
Bates, R. P., Tulsa, Okla.	5,687.42	5,573.68
Bartlett Production Co., Rockdale	313.75	193.89
Bay Oil Corp., Tulsa, Okla.	108,339.54	105,909.41
Bayless, A. A., Fort Worth	735.88	713.55
Bazzoon, O. A., Vernon	259.31	235.68
Beams, Drew, Okmulgee, Okla.	1,521.19	1,429.91
Beard, J. G., Duncan, Okla.	26,123.91	25,606.54
Beggs-Strip, George, Fort Worth	1,596.88	1,975.63
Bell Oil & Gas Co., River Bed Acct., Tulsa, Okla.	8,339.95	7,503.04
Bell, J. R., et al (Sun lease), Fort Stockton	2,903.70	1,524.44
Bell & Graddy, Inc., Dallas	5,940.91	5,687.41
Bernice Oil Co., Saratoga	9,543.80	7,119.50
Bettison, Hilery N., San Antonio	5,471.50	5,362.06
Beverly Oil Co., Chicago	None	None
Bexara Oil Co., San Antonio	802.14	558.82
Biel, William A., Van Ormy	78.00	59.28
Big Indian Oil & Development Co., Dallas	9,501.34	9,311.31
Big Indian Syndicates, Dallas	38,297.38	37,600.69
Big Lake Oil Co., Pittsburgh, Pa.	1,181,433.29	1,137,412.85
Big State Oil Corp., Houston	1,750.78	1,619.50
Biggs Oil & Gas Co., McKinney	957.45	957.45
Bill & Dave Oil Co., Shreveport, La.	20,164.89	14,733.77
Birk, C. E., and C. L. Kelley, Iowa Park	110.59	103.94
Bishop Corp., San Francisco, Calif.	25,095.00	24,572.06
Bishop, M. E., and T. A. King, Brownwood	145.75	121.12
Black Cat Oil Co., Electra	724.23	680.74
Black, et al, Fort Stockton	2,713.21	1,219.54
Black & Dittman, Fort Stockton	1,862.01	977.56
Black Knight Co., Peoria, Ill.	10,147.74	9,871.46
Buster Black, et al	7,518.77	4,751.65
Black, Harry W., Peoria, Ill.	4,747.20	4,652.25
Black, W. A., Midland	696.46	655.48
Blackstock Oil Co., Oklahoma City	17,586.33	17,234.59
Black & Stroube, Dallas	11,071.13	10,646.30
Blackwell Oil & Gas Co., Cushing, Okla.	58,279.20	56,717.48
Bloxam & Nash, Henderson	2,055.00	924.63
Bluebonnet Oil Co., Wichita Falls	293.55	265.52
Boardman & Ulrich, Corsicana	1,198.00	1,150.08
Bohner, Crenshaw & Whitehill, Burkburnett	7,437.21	6,688.57
Bohner, C. F., Kansas City	64.00	55.63
Bohner, C. J., et al, Burkburnett	9,708.14	9,113.39
Bohner, C. J., Oil Co., Burkburnett	20,409.74	18,966.83
Boller, C. W., Wichita Falls	19,121.92	18,516.66
Bolin, D. H., trustee, Graham	7,023.67	6,602.25
Bond & Gillespie, Longview	5,348.64	5,241.72
Bond & Johnson, Longview	10,615.11	10,402.81
Bond, J. B., and Republic Production Co.	5,015.95	4,915.64
Bonner Co., Wichita Falls	12,608.13	11,980.18
Borden, S. P., Shreveport, La.	10,892.60	10,692.58
Borealis Oil Co., Oklahoma City, Okla.	2,447.98	2,370.92
Bashadd, M. J., & Sons, Wichita Falls	1,988.05	1,123.65
Bostex Oil Corp., Johnstown, Pa.	11,585.52	11,227.80
Bourbon Royalty Co., Dallas	1,376.36	1,147.14
Bowers Oil Co., Vernon	1,010.81	970.21
Bowles Oil Co., Corsicana	27,797.34	27,241.39
Bowles, Robert, Oil Co., Houston	10,126.23	9,911.59
Bowman Oil Co., Rockdale	307.30	190.42
Bowser & Beckett, Dallas	6,875.07	6,608.14
Brachman, S., Fort Worth	5,840.20	5,723.37
Bradstreet, L. G., Co., Fort Worth	23,533.67	22,175.65
Brady Brothers, Minerva	541.29	336.13
Bram, Lee, Glendale, Calif.	232.56	221.15
Brannon & Murray, Coleman	3,544.70	3,544.70
Brazelton Brothers, Graham	2,198.35	2,030.30
Brazos River Gas Co., Mineral Wells	10,706.46	10,584.77
McMurray, T. C., (receiver, Brek Oil Co.), Fort Worth	12,225.25	12,217.24
Bridges, Milton, Kilgore	5,272.75	5,167.29
Bridwell Oil Co., Wichita Falls	127,458.47	114,881.29
Bridwell & Heydrick, trustee, Wichita Falls	794.20	769.38
Bridwell & Mayfield, Wichita Falls	5,683.18	5,565.37
British American Oil Producing Co., Tulsa	157,506.39	150,208.10
Britton & Gordon, Strawn	554.72	543.63
Brogan Oil & Gas Co., Tyler	5,830.39	5,713.77
Brothers Oil Corp., Fort Worth	5,534.31	5,423.62
Brown & Guinn Oil Co., Wichita Falls	173.52	170.05
Brown Farm Oil Co., Fort Worth	765.92	764.32
Brown & Lickey, Wichita Falls	484.58	475.12
Brown, Mrs. Carrie L., et al, Orange	5,099.17	3,990.86
Brown, Dr. E. W., estate, Orange	4,453.51	3,509.81
Brown, H. L., Fort Worth	5,802.25	4,305.84
Bryant, R. B., Dallas	13,389.38	13,121.59
Bryson Oil & Gas Co., San Angelo	5,176.75	5,164.16
Buchanan, A. A., San Antonio	15,483.49	14,955.16
Buck Oil Corp., San Antonio	799.43	799.43
Buck & Sandwich, Mirando City	857.08	685.67
Burk Royalty Co., Burkburnett	9,295.07	8,690.89
Burkburnett Production Oil Trust, Baltimore, Md.	784.10	716.38
Burnes, James N., Longview	5,811.07	5,694.84
Burnett & Foshee, Gladewater	5,416.80	5,308.46
Burnett & Lee, Gladewater	3,699.56	3,625.56
Burnham, J. M., et al, Fort Worth	6,729.72	5,241.19
Burns, Elizabeth L. Wichita Falls	1,440.54	1,424.73
Burns, L. T., Wichita Falls	69,833.25	68,235.87
Burton Drilling Co., Dallas	27,367.45	25,797.66
Butler, Calhoun & Boynton, Overton	13,228.54	12,786.54
Butler & McAlister, Olney	226.35	221.82
Buttram Petroleum Corp., Oklahoma City, Okla.	22,987.18	22,985.26
Buttram, Frank, Oklahoma City	205.92	196.01
Bynum & Palmer, Rockdale	82.64	56.20
Bynum, W. W., estate, Rockdale	581.27	360.40
Byrd Frost, Inc., Dallas	89,676.67	86,328.24
C		
C. P. Oil Co., Henderson	113,438.40	66,011.62
C. R. & M. Drilling Co., San Antonio	9,735.38	9,601.65
Cable Oil Co., Wichita Falls	8,156.70	7,268.58
Cady, C. C., Moran	251.29	205.59
California Co., The, Dallas	1,120,523.00	725,408.04
California Pet. Corp. of Venezuela, Shreveport, La.	181,764.94	178,399.74
Callihan, George, Albany	2,258.38	2,051.02
Cal-Tex Corp., Kilgore	6,534.74	6,336.08
Cambrian Oil Co., Amarillo	7,588.17	6,142.11
Camp Oil & Gas Co., Dallas	342.34	324.48
Campbell & Tong, San Antonio	7,303.68	3,023.22
Campbell, Alma, Fort Worth	1,074.36	1,021.07
Canyon Oil & Gas Co., Inc., Cross Plains	2,611.59	2,549.29
Capps, L. W., Houston	21,693.03	17,353.43
Cardinal Oil Co., San Angelo	43,985.26	23,961.16
Carey, C. W., Wichita Falls	4,222.34	3,871.88
Carlin, W. W., Ranger	402.00	382.00
Carpenter & Unice, Sour Lake	1,296.38	1,170.39
Carpenter, J. D., Olney	1,006.66	771.21
Carr, A. P., Hollywood, Calif.	5,377.75	5,170.95
Cashdollar & Snyder, Brownwood	144.82	123.20
Carter, Fred, et al, Wichita Falls	511.25	490.78
Caruthers Co., San Antonio	1,095.82	755.78
Centennial Oil & Gas Co., Dallas	39,065.00	30,212.70
Central Commercial Oil Co., Tulsa, Okla.	17,238.58	16,890.89
Central Oil Co., Cameron	1,460.44	2,271.38
Central Oil Corp., Fort Worth	5,383.00	5,060.48
Cezeaux, P. C., Humble	5,705.00	4,564.44
Chalk, Otis, Big Spring	3,423.30	2,106.38
Champlin & Bass, Inc., Tyler	62,439.86	61,191.10
Champlin Refining Co., Enid, Okla.	103,649.63	87,971.83
Chapman, E. L. (David Donoghue, receiver), Fort Worth	107,475.46	90,520.83
Charter Oil Co., Brownwood	4,874.06	4,735.15
Chatham Oil Co., Tulsa, Okla.	8,939.73	8,760.93
Cherokee Chief Oil Co., Gladewater	26,905.04	24,807.27
Choctaw Oil Co.	9,566.65	9,375.31
Christian & Edwards, Longview	6,150.51	6,027.50
Christie Bros., Wichita Falls	25,702.21	25,154.59
City National Bank, Wichita Falls	922.88	874.17
Claggett & Evans, Mirando City	1,248.28	1,011.04
Clark Buffalo Oil Corp., Buffalo, N. Y.	494.69	460.93
Clark & Cowden, Duncan, Okla.	46,963.41	45,834.77
Clark, C. W., Wichita Falls	4,223.95	4,138.41
Clark, R. R., et al, Wichita Falls	20,691.33	20,691.33
Clark, R. R., Wichita Falls	7,239.13	7,192.32
Clarkson, H. W., Buffalo, S. Dak.	15,028.47	14,582.39
Clarkson, William, Jr., Houston	3,710.82	3,562.40
Clay Dome Oil Co., Albany	514.09	462.68
Clay, J. D., Houston	3,007.87	2,396.16
Clayton Key Oil & Gas Co., Amarillo	4,358.47	3,636.82
Clear Lake Oil Co., Rockdale	534.78	331.41
Clem Oil Co., Houston	293.08	236.24
Clopton & Lewis, Dallas	6,100.78	5,978.76
Cockerham, Clyde, et al, Shreveport, La.	7,208.04	7,063.87
Cable-Whittenburg Oil Co., Amarillo	312.07	205.97
Cockburn & Boase, Frederick, Okla.	17,465.55	15,284.48
Coffield & Hale Oil Co., Rockdale	846.80	525.56
Cohen, Aaron, Baltimore, Md.	9,317.73	8,397.52
Cole Petroleum Co., Laredo	13,047.95	10,580.46
Cole, W. C., Wichita Falls	885.45	827.39
Coline Oil Corp., Oklahoma City	635.79	612.82
Collie, B. F., Breckenridge	1,537.94	1,450.75
Collins-Lanier Syndicate, Shreveport, La.	6,082.22	5,936.93

Name—	Barrels	Value
Collins, J. L., & Co., Corsicana	11,364.66	11,005.56
Columbia Oil & Gas Co., Dallas	95,818.67	91,075.80
Combined Oil Interests (W. B. Powell, receiver), Fort Worth	42,963.78	41,132.10
Combs, Mrs. L. A., Fort Worth	843.14	656.28
Comet Petroleum Co., Fort Worth	1,872.39	1,217.06
Concord Oil Co., Dallas	5,356.17	5,249.06
Condor Petroleum Co., Abilene	8,467.29	6,701.56
Connell, Wixen & Frazier, El Dorado, Kans.	827.92	670.62
Conner Oil Co., Wichita Falls	9,330.15	6,370.11
Conservative Oil Co., Dallas	50,114.52	48,972.40
Consolidated Production Co., Fredericksburg	424.00	310.30
Continental Oil Co., Ponca City, Okla.	1,036,298.41	793,859.57
Conway Brothers, Ranger	2,863.38	2,766.19
Conyers, C. R., Electra	643.93	596.33
Cooper, G. W., Wichita Falls	7,431.97	7,317.16
Cooper, G. W., et al, Wichita Falls	726.04	669.81
Cooper, W. R., and George B. Hamilton, Olney	1,700.99	1,553.45
Coppock & Coleman, Iowa Park	8,434.55	7,253.67
Corbett, J. T., and R. V. Tidwell, Graham	391.93	327.72
Corbin, W. D., and H. C. Culp, Henderson	749.00	734.02
Cordova Union Oil Co., Fort Worth	54,027.13	51,870.00
Cornhusker Oil Co., Lincoln, Neb.	885.45	708.36
Cornelius, C. F., trustee, Fort Worth	16,434.35	16,034.36
Cosby Production & Royalty Co. (E. J. McCurdy, receiver), Fort Worth	7,925.86	5,026.24
Moore, Georgo N., and Henry Zweifel, receiver for Cosden Oil Co., Fort Worth	119,668.21	87,987.20
Cotton, J. H., Wichita Falls	89.48	84.10
Cox, Edwin B., and Jake L. Hamon, Ardmore, Okla.	117,638.01	113,953.52
Cox, Edwin B., Ardmore, Okla.	1,095.17	977.29
Crabb & McNeel, San Angelo	1,174.34	1,156.08
Craig & Lowrie, Pittsburgh, Pa.	1,028.14	703.50
Cranfill-Reynolds Co., Houston	312,201.15	251,532.75
Crenshaw Oil Corp., Wichita Falls	8,798.12	8,609.09
Croft & Connor, Fort Worth	6,328.00	5,052.80
Cron & Gracey, Arp	6,011.66	5,891.37
Crosbie, J. E., Tulsa, Okla.	3,669.60	2,382.92
Crown Central Petroleum Corp., Houston	28,343.13	23,182.64
Crown Central Petroleum Corp., Houston	10,382.32	8,210.51
Culbertson Co., Wichita Falls	5,806.00	5,587.09
Cullen Oil Co., Henderson	8,276.07	8,110.55
Cullen and West, Houston	953.00	762.40
Cullen, H. R., et al, Houston	402.83	330.32
Cullum, E. P., Wichita Falls	16,591.62	16,043.25
Cuno, Mrs. Bertha, Moran	1,211.47	1,114.55
Cunningham & Lynch, Graham	5,975.08	5,818.32
Curtis, James A., Frederick, Okla.	689.23	686.25
Cushing Refining & Gasoline Co., Cushing, Okla.	5,375.94	3,376.09
D		
D. & L. Production Co., Houston	33,722.37	31,005.28
Dale & Crawford, Electra	518.20	511.06
Dale Knotts Oil Co., Wichita Falls	219.15	219.15
Dale, Jack B., Wichita Falls	2,250.94	2,222.64
Dalton, Jack, Oil Co., Mineral Wells	852.00	838.34
Danciger Oil & Ref. Co., Fort Worth	394,899.22	323,032.66
Daniel Drilling Co., Wichita Falls	2,600.01	2,600.01
Purcel, Carl, care Darby Lynde Co., Tulsa	12,013.13	11,339.03
Darby Petroleum Corp., Tulsa	81,699.84	80,655.72
Davis, Henderson, Longview	5,594.58	5,482.68
Davis, Henderson & Hamilton, Longview	6,422.96	6,295.48
Davis Oil Corp., Vernon	27,994.28	25,591.76
Dawson, C. K., Ponca City, Okla.	4,742.45	4,647.60
Day & Armstrong, Gladewater	5,356.58	5,248.47
Day & Co., Gladewater	5,347.05	5,240.13
Dean & Adkisson, et al, Fort Worth	10,673.11	10,157.60
Dean Oil Co., Burkburnett	122.54	110.29
Dearing, R. H., & Sons, Dallas	5,109.00	5,007.50
Dearing, R. H., & Sons, Dallas	6,061.00	5,874.17
DeArman Producing Co., Tyler	25,483.31	24,973.64
Deep Oil Development Co., Wichita Falls	29,964.46	29,644.62
Deep Rock Oil Co., Tulsa	61,580.74	60,349.11
Deep Rock Oil Co., Tulsa	16,502.32	16,172.27
Deep Sand Oil Co., Gladewater	4,618.27	4,525.90
Degener & Co., Tyler	5,402.36	5,223.50
Delaney, W. A., Jr., Ada, Okla.	5,796.06	5,680.14
DeMayo, Bessie, Kansas City, Mo.	15,237.56	14,935.79
DeMontrond Oil Corp., Tyler	7,787.01	7,631.27
Den-Tex Oil Co., Denison	3,515.40	3,444.11
Den-Wich Oil Co., Abilene	669.53	560.72
Dennis, J. S., Moran	640.22	566.10
Derosa Oil & Gas Co., Amarillo	5,763.15	5,071.58
Despot, George, trustee, Shreveport, La.	5,524.00	5,413.52
Detroit-Texas Development Co., Luling	2,265.00	1,698.75
Developers Oil & Gas Co., Wichita Falls	378.71	378.71
Devonian Oil Co., Tulsa	163,565.78	158,065.36
Dickey Bros., Albany	1,040.00	769.60
Dillars Oil Co., Wichita Falls	32,135.33	30,937.90
Dimham Oil Co., Shreveport, La.	68,606.84	67,065.98
Dink Oil Co., Bagdad, Fla.	5,279.02	5,205.61
Dittman Oil Co. (Shell lease), Fort Stockton	3,134.58	1,645.65
Dixon Creek Oil Co., Amarillo	99,918.80	79,022.77
Dolores Oil Corp., Tyler	8,999.17	8,780.04
Donley & Chastain, Tyler	5,598.00	5,281.85
Dorian, R. P., Wichita Falls	6,444.22	6,444.22
Dorough-Smith Oil Co., Marshall	16,620.00	16,263.07
Douglas Brothers & Johns, Electra	847.92	814.23
Douglas Brothers Oil Co., Electra	1,059.69	1,059.69
Douglas Production Co., Electra	2,893.92	2,691.46
Dowell, B. G., Batson	6,980.24	5,584.19
Driscoll, R., estate, Corpus Christi	17,216.77	13,661.00
St. Germain, R. J., and Droppleman Drilling Co., Tulsa and Wewoka, Okla.	4,730.94	4,636.30
Duffield & Howard Oil Co., Tulsa, Okla.	619.53	526.28
Duke, W. R., Wichita Falls	17,908.32	17,148.91
Duluth-East Texas Oil Co., Duluth, Minn.	8,420.29	8,019.95
Duluth Arrowhead Oil Co., Duluth, Minn.	3,984.44	3,904.75
Dunaway, J. E., et al, Wichita Falls	1,292.62	1,203.12
Duncan & Holt, Dallas	12,449.09	11,763.34
Dungan Brothers, Breckenridge	2,996.83	2,506.96
Dunlop, Robert, Ponca City, Okla.	1,543.21	1,350.53
Dunlop, Robert, Ponca City, Okla.	1,671.57	1,470.94
Duquesne Oil Corp., Eastland	321.76	296.02
Dunning, William H., Jr., Fort Worth	5,534.14	4,745.50
Duval Oil Corp., San Antonio	133,277.95	107,386.77
Dye & Gillette, Tulsa, Okla.	13,089.51	11,456.18
Dyck Oil Co., Tulsa, Okla.	17,581.30	17,229.68
Dyer, W. H., Graham	1,948.00	1,548.40
E		
E. & D. Oil Co., Shreveport, La.	20,433.36	20,024.68
E. & H. Oil Co. (S. Reele, receiver), Dallas	6,281.00	6,155.38
Earle, E. S., Fort Worth	5,861.00	5,744.00
East Batson Oil Co., Batson	11,018.72	8,783.57
East Shore Oil Co., Henderson	17,687.00	16,169.97
East Texas Oil Refining Co., Dallas	373,040.13	360,856.95
Easter-McCurdy, Fort Worth	5,808.95	3,775.82
Eastland Oil Co., Fort Worth	43,134.20	31,211.53
Easton, E. S., Wichita Falls	628.85	628.85
Eckert, F. H., San Antonio	647.22	490.29
Eddleman & Payne, Inc., Fort Worth	2,777.82	2,741.54
Edson Petroleum Co., San Angelo	5,471.90	5,224.45
Edwards Drilling Co., Houston	5,857.63	5,740.47
Electra Production Co., Inc., Electra	490.52	477.43
Ellis & Anderson, San Antonio	32.95	23.72
Ellis & Dubois, Fort Worth	1,069.54	841.57
Elm Oil Co., Tulsa	10,856.52	10,639.39
El Rio Oil Co., Amarillo	294.35	194.28
Emerald Oil Co. of Texas, Winfield, Kans.	3,508.20	2,613.95
Empire Gas & Fuel Co., Bartlesville, Okla.	563,692.48	515,597.97
Engel, E. A., Albany	4,216.10	4,024.69
Eppenauer, A. R., San Angelo	4,143.74	2,628.29
Eppenauer, E. L., trustee, Fort Worth	549.69	516.65
Equity Oil Co., Fort Worth	5,238.45	5,133.68
Erie Investment, Ltd., of Texas, Toronto, Canada	250.90	145.41
Ernest Oil Co., Rockdale	183.99	114.90
Esiick, Mrs. Mattielee, Longview	3,185.26	3,121.55
Estes, Joe E. (Ras Pool lease), Tyler	5,715.65	5,601.33
Etnyre Petroleum Corp., Tyler	6,471.69	6,342.26
Etex Oil Co., Dallas	4,986.63	4,886.90
Everett, Carl B., Gladewater	5,519.33	5,336.62
Everitt Oil Co., Tulsa, Okla.	9,830.73	9,634.12
Everts, C. A., Dallas	84,446.88	81,750.48
Eubank, R. O. and B. K., Coleman	794.76	591.49
Eysenbach & Jackson, Dallas	6,346.72	6,219.79
F		
F. H. E. Oil Co., Fort Worth	112,342.65	107,379.82
F. & M. Drilling Co. (G. L. Gillespie, receiver), Kilgore	5,432.62	5,323.97
Fain-McGaha Oil Co., Wichita Falls	235,677.16	223,760.17
Fair & Thompson, Tyler	8,807.76	8,631.59
Fair, R. W., Oil Co., Tyler	14,625.10	14,332.60
Fairway Production Co., Laredo	11,837.59	3,784.50
Falcon Co., Fort Worth	40,496.58	36,975.79
Falls Production Co., Wichita Falls	5,382.36	5,234.43
Falvey, J. C., Longview	14,699.13	14,362.32
Farish & Ireland lease, Houston	4,606.08	3,684.87
Farley, George E., McCamey	11,914.88	7,556.57
Farlyn Oil Co., Houston	16,398.01	14,714.67
Farmers State Bank, Burkburnett	.....	723.71
Farrell Oil Co., Amarillo	3,239.17	2,646.36
Federated Oil Co., Wichita Falls	41,415.07	40,319.56
Ferguson, W. R., Wichita Falls	713.47	696.45
Fielder, H. W., trustee, Lockhart	.....	719.90
"56" Petroleum Corp. of Texas, Miles City, Mont.	3,812.64	2,630.59
Findlay Dyck Oil Co., Tulsa, Okla.	5,470.21	5,360.81
Finston, Mark, Special Account, Tulsa, Okla.	9,007.22	8,180.65
First National Bank, trustee, Fort Worth	6,305.51	6,027.94
Flanagan Production Co., Inc., Longview	16,880.60	15,218.02
Fleming-Kimbell Corp., Fort Worth	101,245.14	97,482.54
Fleming & Kimbell, Fort Worth	3,160.33	2,375.67
Flynn, W. B., Inc., Beaumont	9,518.21	7,840.76
Forest Oil Corp. (W. B. Swearingen, receiver), Lockhart	2,405.25	1,752.94
Foster, Barnsley Syndicates, Inc., Laredo	1,001.80	752.85
Four Oil Co., Wichita Falls	969.06	884.02
Fox & Adams, Burkett	4,397.61	3,637.61
Fox & Butler, Dallas	16,951.58	16,398.54
Fox, Perry L., & Thorsen, Mertzon	523.90	430.20
Franklin, E. J., and M. J. Sullivan, Kansas City, Mo.	415.30	382.08
Franklin, Wirt, Ardmore, Okla.	161.02	158.82
Freels, Hugo, Chicago, Ill.	1,507.84	956.97
Freeman-Hampton Oil Co., Wichita Falls	3,996.11	3,882.75
French Oil Corp., Laredo	30,838.60	24,978.17
Fresno Oil Co., Burkburnett	25,921.10	23,663.30
Fullwood, Travis, Corsicana	6,993.30	6,718.00
Fultz, W. B., et al (J. J. Scott farm), Graham	2,560.63	2,467.64
G		
G. & A. Oil Co., Longview	16,747.37	16,323.86
G. I. Oil Co., Wichita Falls	5,926.16	5,360.03
G. & R. Oil Co., San Antonio	6,282.70	6,157.05
Gaither Production Co., Rockdale	464.57	291.15
Galvez Oil Corp., Tulsa	53,861.91	52,523.91
Gandy, L. O., Tyler	5,735.00	5,620.30
Gant & Wegener, Ardmore, Okla.	8,266.93	7,707.84
Gardner Bros., Wichita Falls	2,566.31	2,258.33
Gardner, Wilson & McCaldin, Wichita Falls	538.07	538.07
Gaskill, S. A., Tulsa	5,934.91	5,816.20
Gaskill, M. E., Tulsa	13,893.19	13,615.33
Gates Oil Co., Ardmore, Okla.	1,839.58	1,727.80
Gates Oil Co. (Wyoming Corp.), Littleton, Colo.	2,046.05	1,485.73
Gates, Bacon, Lea, Wichita Falls	2,500.09	2,367.94
Gatlin Oil Co., San Antonio	7,464.52	5,790.64
Gaynita Oil Co., Dallas	2,550.50	2,500.02
Geyer, Adolph A., and R. G. Storey, Dallas	5,067.87	4,966.51
Gholson, John M., Ranger	1,088.87	1,048.69
Gibson, Johnson & Merrick, Fort Worth	7,937.13	7,689.38
Gibson & Johnson, Inc., Fort Worth	6,094.66	5,916.12
Gilbert Co., The, Beaumont	3,903.91	3,075.36
Gilcrease Oil Co., Tulsa	55,126.01	54,023.48
Gillman Brothers, Amarillo	2,130.29	1,563.90
Gilman & Conway Brothers, Ranger	3,128.96	3,092.81
Gilman, R. F., and J. L. McMurray, Cisco	6,147.18	5,726.93
Ginter-Jones Oil Co., Nacogdoches	314.57	234.76
Ginter-Lange Oil Co., Inc., Nacogdoches	1,083.44	828.52
Girard Corp., Dallas	91,833.58	83,204.90
Gist-Way Oil Co., Colorado	2,602.53	2,391.43
Gladewater Refining Co., Gladewater	17,299.00	8,530.40
Gladis Oil Co., Saratoga	2,513.82	1,675.87
Glass Brothers, Rosebud	454.13	284.36
Glasscock, C. G., Longview	15,476.73	15,133.16
Glasscock, Lonnie, Longview	17,979.01	17,723.90
Glasscock, Rosa V., Longview	3,146.92	3,083.99
Glenridge Oil Corp., St. Louis, Mo.	.....	2,162.57
Glover, S. D., Vernon	1,106.33	988.90
Glover, S. D., et al, Vernon	273.95	213.04
Gold Star Oil Co., Ardmore, Okla.	5,908.96	5,790.78
Golden West Oil Co., San Antonio	11,783.55	7,199.08
Golding & Cochran, Dallas	26,597.31	25,421.51
Golding-Murchison Oil Co., Dallas	344,864.21	259,958.63
Goldsmith, N. D., Olney	6,322.27	5,988.27
Goodwin, P. B., et al, Breckenridge	139.00	133.44
Goodwin, P. B., trustee, Breckenridge	1,738.00	1,129.69
Gordon, Ann B., Oil Co., Dallas	2,109.53	2,096.97
Gorsuch Oil Co., Abilene	2,117.83	1,795.31
Grady, Mary E., Electra	1,527.15	1,498.91
Graham, Charles, Myra	762.64	566.87
Graham & Harrison, South Bend	3,100.97	3,021.00
Granite Oil & Gas Co., Electra	252.87	252.87
Grassroots Oil Co., Fort Worth	887.40	887.40
Gray & Adams, Inc., Gainesville	1,431.74	1,145.39
Grayback Development Corp., Wichita Falls	4,061.98	3,646.42
Grayburg Oil Co., San Antonio	125,189.23	82,534.39
Great Eastern Oil Co., Dallas	15,130.24	14,827.60
Great Western Oil Corp., Tyler	6,427.48	6,298.93
Green & Owens, Brownwood	467.02	467.02
Greene Production Co., Fort Worth	25,633.62	19,612.74
Greenwood, C. F., Fort Worth	1,942.56	1,838.23
Greeg Oil Co., Gladewater	33,837.04	33,028.30
Griffith, S. B., agent, First National Bank & Trust Co., Tulsa, Okla.	10,529.64	10,492.47
Grisham-Hunter Corp., Abilene	29,626.45	28,931.40
Gulf Production Co., Houston	6,778,849.00	$5,344,638.11
Group No. One Oil Corp., Fort Worth	944,863.28	846,562.05
Guiberson Oil Co., Dallas	14,014.00	13,733.38
Guiberson, S. A., Jr., Dallas	10,550.00	10,339.78
Guthrie, George, et al, San Antonio	6,293.02	6,045.98
Guthrie, Cole & Ferguson, Antelope	534.87	467.98
Gwynn, P. F., Wichita Falls	4,683.09	4,476.41
Gwynn, P. F., individually and agent for J. F. Boyd, J. D. Overbey and Tom Corridon, Wichita Falls	865.85	783.66
H		
H. B. J. Oil & Gas Trust, Baltimore, Md.	1,420.03	1,324.37
H. B. W. Oil Co., Bagdad, Fla.	12,488.59	12,168.72
H. & H. Drilling Co., Gladewater	187.50	163.34
H. & H. Drilling Co., Gladewater	708.00	610.34
H-Y Oil Co., Fort Worth	16,697.14	15,966.57
Haddaway, R., et al, Fort Worth	5,631.76	5,455.18
Hale, Hugh Edward, Kansas City, Mo.	8,448.47	7,988.52

Name—	Barrels	Value
Halliday, H. J., Beaumont	979.67	774.11
Hamil & Hamil, Bay City	56,078.77	46,897.37
Hamil Smith Oil Corp., Houston	28,311.79	26,644.65
Hamilton, W. L., Bridgetown	1,004.03	987.74
Hamilton, Walter R., trustee, San Antonio	3,024.53	2,412.44
Hamon, Jake L., Ardmore, Okla.	15,896.67	14,604.39
Hammon & Heyser, Wichita Falls	8,376.36	7,781.80
Hammon, W. H., Wichita Falls	19,954.77	19,700.24
Hammond Oil Co., Fort Worth	25,610.18	25,070.12
Hammond & Waggoner, Wichita Falls	661.56	661.56
Hanbury, Harry, Pasadena, Calif.	28,921.00	28,346.39
Handrick, August, Moran	31.07	25.48
Hankamer & Lee, Sour Lake	5,501.64	5,390.84
Hankamer, Earl C., & Co., Sour Lake	217.40	173.92
Hanlon Gasoline Co., Tulsa	1,497.89	1,336.73
Harcher Oil Co., Kilgore	2,076.89	1,799.75
Hardie, J. M., & Co., Sour Lake	144.83	115.86
Hardy Oil Co., Wichita Falls	1,264.34	1,136.35
Harrell, J. T., Wichita Falls	403.33	356.28
Harper Petroleum Co., Bryson	12,185.61	12,185.61
Harris & Simons, Tulsa	3,545.12	2,694.29
Harris, M., Dallas	5,480.83	5,371.21
Harris, L. M., John M. Stephens, receiver, Tyler	5,164.95	5,061.65
Harrison Oil Co., Houston	27,153.00	24,575.51
Hart, W. S., Vivian, La.	971.21	971.21
Harwell, E. P., Tulsa	939.73	845.13
Haskell, Frank, Tulsa	806.66	724.33
Hastings, Allen & Craft, Overton	5,565.02	5,453.72
Hawkeye Petroleum Corp., Longview	38,981.03	37,784.97
Hawkins, J. C., Tyler	4,631.86	4,539.22
Hawkins, W. L., Wichita Falls	2,922.98	2,586.20
Hawley, J. A., guardian, estate of K. Hawley, Ottawa, Canada	123.73	113.83
Hayes, Reese L., Olney	1,025.81	860.03
Hayner, J. M., trustee, Tyler	5,316.35	5,424.85
Haynes Drilling Co., Inc., Shreveport, La.	65,527.96	64,088.82
Hayes, F. C., trustee, Tulsa, Okla.	1,027.43	1,975.93
Healy, J. R., Casper, Wyo.	6,076.72	5,701.41
Hedrick-Camp Drilling Co., Dallas	1,939.32	1,657.43
Heep Oil Corp., Houston	17,299.04	16,752.17
Hefley McIntosh & Thomas, Cameron	412.34	266.66
Heidrich, E. C., Jr., Peoria, Ill.	923.64	634.51
Helvetia Oil Co., San Antonio	8,983.32	6,759.89
Hemby, J. M., Electra	703.66	680.47
Hemisphere Oil Corp. (R.N. Campbell, receiver), Vernon	9,530.56	8,621.06
Henderson & Holden, Wichita, Kans.	5,655.09	5,541.99
Henke, D. W., Dallas	5,581.00	5,469.86
Henry Oil Corp., Luling	14,941.86	14,643.02
Henson, Odell, Okmulgee, Okla.	13,299.00	12,706.00
Herbert Oil Co. of Texas, Fort Worth	6,534.53	5,786.40
Herring, S. C., Brownwood	405.00	405.00
Herrogan Oil Corp., Pampa	6,678.84	6,431.05
L. C. Heydrick, Wichita Falls	7,969.90	7,559.26
Heyser & Heard, Dallas	31,236.94	30,612.20
Hickey, T. J., et al, Corsicana	56.38	49.38
Hickok Producing & Development Co., Toledo, Ohio	150.39	132.56
Hickory Oil & Gas Corp., Fort Worth	2,589.32	2,346.22
Hill Read, Inc., Dallas	13,324.37	12,930.17
Hinchcliffe, W. W. and J. L., Mexia	10,204.80	10,007.88
Hindman, G. W., et al, San Antonio	5,631.76	5,392.15
Hines, Harry, Wichita Falls	1,942.40	1,898.03
Henson, G. D., and R. V. Tidwell, Graham	3,992.11	3,805.47
Hinton, W. B., Lockhart	11,441.48	10,216.15
Hitchman & Howard, Inc., San Antonio	1,489.24	1,094.38
Hobbs Oil Co., Tulsa	1,178.12	1,133.28
Hobbs, Ferguson, Neeley, Addison H. Gibson, Leroy Adams, Tulsa, Okla.	1,447.00	1,304.80
Hoben & Salmon, Nocona	490.08	372.46
Hobson & Voorhees, Frost Woodhull receiver, San Antonio	505.06	371.46
Hoffman & Page Co., Eastland	13,773.27	12,885.47
Hoffman, P. L., Cisco	37,837.12	32,175.15
Holbrook & Woods, Wichita Falls	3,435.19	3,272.92
Holcombe, Thos., Wichita Falls	578.16	578.16
Holder, F. W., and J. B. Gordon, Breckenridge	390.60	330.21
Holloway, R. R., receiver, Brownwood	928.06	884.74
Holmes Brothers-Moore, Amarillo	2,357.01	2,075.16
Holmes Brothers, Quinn lease, Amarillo	13,440.73	11,827.84
Holmes, Hill, Selbold & Holmes, Moore lease, Amarillo	12,771.90	11,239.26
Holmes-Newblock, Amarillo	2,117.10	1,863.03
Home Gas Co., Cushing, Okla.	1,098.72	765.85
Home Oil & Gas Co., Albany	650.89	593.41
Hooks, Ridgeway & Weaver, Donna	5,033.33	2,516.65
Whisenant, Herbert W., receiver for John Hooser, Dallas	32,986.75	30,727.72
Whisenant, Herbert W., receiver for John Hooser, Dallas	29,044.71	27,803.09
Hope Oil Co., Fort Worth	10,454.81	9,727.33
Hoppes, W. T., Burkburnett	535.42	501.45
Horn, T. W., Houston	162.95	130.36
Horseshoe Lease Syndicate, Dallas	6,303.76	6,177.68
Houston Gulf Gas Co., Houston	3,953.42	3,163.13
Houston Oil Co. of Texas et al, Houston	487,905.23	449,466.45
Houston Production Co., Houston	57,024.42	49,914.72
Howard, Duffield & Berlin, Tulsa, Okla.	824.34	708.06
Howard Petroleum Corp., Tulsa, Okla.	35,980.37	35,027.58
Howard County Oil Corp., Longview	6,540.19	4,190.56
Huber, J. M., Petroleum Co., Borger	30,505.75	19,853.58
Huey, Ora, Borger	3,223.24	2,320.73
Huffman Oil Corp., Amarillo	2,426.31	1,690.93
Hughes, James B., Bloomington, Ill.	11,085.52	10,668.35
Hughes, J. K., Oil Co., Mexia	11,534.02	10,254.96
Hull, L. V., Wichita Falls	3,836.06	3,831.05
Humble Oil & Refining Co., Houston	7,965,911.33	6,941,098.43
Humphreys Brothers, Inc., et al, Denver, Colo.	27.36	22.16
Hunt Production Co., Tyler	176,856.75	173,306.27
Hunt, Sherman, Tyler	1,718.17	1,683.80
Hunter & Rowe, Dallas	11,676.00	11,447.00
Hunter Oil Corp., Chicago, Ill.	16,427.02	15,396.57
Hunter, T. F., Wichita Falls	15,304.98	14,959.91
Hutchinson Drilling Co., Borger	624.21	485.90
Hyde & James, Albany	800.26	736.23
Hynes, F. P., et al, San Antonio	11,982.53	11,742.88
Hyer, Fred, Fort Worth	12,880.14	8,044.30
I		
Idaho Oil Corp., W. R. Castle, receiver, Tyler	6,111.51	5,967.83
Ilfeld, Arthur C., Las Vegas, N. Mex.	7,009.36	6,869.20
Imperator Oil Corp., Dallas	25,025.76	24,684.99
Imperial Petroleum Co., Dallas	22,095.76	18,692.77
Tennant, Roger C., receiver, Indian State Oil Co., Dallas	8,660.76	8,447.18
Indian Territory Illuminating Oil Co., Bartlesville, Okla.	39,522.08	29,562.43
Interconastal Oil Co., Houston	8,046.79	6,752.36
Investors Oil & Gas Co., Sioux Falls, S. Dak.	618.37	618.37
Invincible Oil Co., Los Angeles, Calif.	31,421.82	30,703.39
Iowa-Payne Oil Co., Marshall	41,462.71	40,636.61
Irick Oil Co., Waskom	216.03	198.75
Irish Oil Co., Tyler	2,364.00	591.00
Iron Mountain Oil Co. of Texas, Tulsa, Okla.	6,275.20	5,573.66
Island Oil Co., Longview	26,281.79	25,760.01
J		
Jackson, J. S., trustee, Sour Lake	2,408.70	1,926.96
Jackson, Wise & Markham, Sapulpa, Okla.	17,529.82	16,783.96
Jackson, Wise & Markham, Tyler	1,150.00	954.50
Jackson, Wise & Snedden, Inc., Sapulpa, Okla.	33,833.72	32,662.67
Jackson, Mrs. M. W., Cuero	5,075.55	4,974.03
Jackson, T. H., Sipe Spring	89.55	78.89
Jacob Oil & Gas Co., Graham	4,680.00	3,566.25
Jacob, Buzzini & Pickett, Inc., San Antonio	2,936.21	1,619.67
James, Tom, estate, Ed James, administrator, Albany	3,295.71	3,160.54
Jamison, Pollard & Forster, Coleman	8,278.51	7,138.92
Janellen Oil Co., Tulsa, Okla.	117.60	101.09
Jarrett, Walter R., Oklahoma City	5,587.49	5,475.75
Jay Kay Oil Co., Little Rock, Ark.	10,945.34	10,360.16
Jeffries, M. G., San Antonio	5,495.62	5,385.70
Jeffries, M. G., San Antonio	10,674.00	10,460.53
J. O. Oil Co., Tyler	5,618.94	5,506.56
Johnson, F. T., Wichita Falls	339.18	300.17
Johnson, T. A., trustee, Tyler	5,587.11	5,433.87
Johnson, T. A., trustee, Tyler	5,534.44	5,423.75
Johnson, T. A., and John Owen, trustees, Tyler	5,847.56	5,708.38
Johnston & Rogers, Tyler	11,509.88	11,279.68
Johnston, Wyche & Yarbrough Oil Co., Longview	6,352.56	6,225.56
Jones Doss Oil Co., Oklahoma City	35,806.11	35,089.94
Jones & Oates, Amarillo	1,961.00	490.25
Jones-O'Brien, Inc., Shreveport, La.	57,472.63	56,323.18
Jones Doss Oil Co., Oklahoma City, Okla.	35,806.11	35,089.94
Jones, E. W. and F. D., Dallas	14,786.11	14,490.41
Jones, F. C., Dallas	4,281.00	4,195.02
Jones, Hugh, Burkburnett	2,289.00	2,620.20
Jones, J. A., Moran	164.34	164.34
Jones, J. E., Wichita Falls	1,021.31	926.71
Jones, W. R., et al, Wichita, Kans.	22,201.94	21,757.91
Judson Oil Co., Tulsa, Okla.	4,077.13	3,891.69
Julia Oil Co., Sour Lake	2,703.65	2,143.14
Hanald, John W., receiver, Julian Oil & Royalties Co., Oklahoma City, Okla.	13,841.15	13,564.33
Justin Oil Corp., et al, Dallas	4,238.42	4,200.77
K		
K-O-T Oil Co., Arp	25,389.63	24,387.10
K. & P. Oil Co., Tyler	29,666.80	28,509.48
Kahle, Gracey & Diver, Dallas	1,701.47	1,312.98
Karona Oil Co., Corpus Christi	11,837.59	11,072.24
Kathleen Oil Co., McAlister, Okla.	15,698.46	15,384.51
Katter-Manziel, Gladewater	5,595.84	6,483.92
Kavanaugh Petroleum Co., Houston	2,837.44	2,590.47
Kay, A. W., and W. B. Fultz, J. Kisinger farm, Graham	4,496.02	4,364.16
Keener Oil & Gas Co. of Texas, Tulsa, Okla.	2,052.66	1,889.47
Kelly, George L., trustee, Wichita Falls	262.63	254.75
Kemrow Co. & Bailey, Wooster, Ohio	8,505.71	8,475.62
Kendrick, P. S., Albany	1,038.50	953.69
Kent Refining Co., Corsicana	6,847.04	4,228.51
Kent, Garland C., Corsicana	15,036.66	12,763.30
Kenwood Oil Co., McAlister, Okla.	13,089.56	12,760.50
Kepley Production Co., Laredo	7,056.21	6,020.35
Kerr, T. P., Corsicana	644.54	608.44
Kerr, E. B., Houston	5,686.99	5,501.46
Kewanee Oil & Gas Co., Titusville, Pa.	199,185.26	186,159.39
Key, H. P., et al, Kilgore	5,306.43	5,200.31
Key, H. P., et al, Kilgore	5,626.00	5,513.48
Keystone Production Co. of Texas, Fort Worth	1,966.94	1,902.89
Kidney & Lester, Fort Worth	5,590.00	5,481.72
Kilgore Refining Co., Inc., Overton	45,373.30	44,271.82
Killam, O. W., Laredo	132,907.71	108,309.64
Kimbell, G. T., and John L. Bostic, Burkburnett	775.81	760.81
Kimbell, G. T., and John L. Bostic, Burkburnett	2,820.80	2,623.34
Kimmell & Woofter, Wichita Falls	3,816.44	3,379.81
Kimmell, W. O., Wichita Falls	2,797.90	2,687.81
King, R. A., trustee, Wichita Falls	1,156.25	924.90
King, A. D., trustee, Shreveport, La.	17,088.99	16,680.17
King & Daniel, Wichita Falls	5,310.14	5,282.37
King & Massengill, Longview	26,753.00	26,218.16
King Royalty Co., Wichita Falls	197,376.85	193,281.36
Kingsbery, J. Jr., (co-ancillary receiver for Julian Oil & Royalty Co., Fort Worth	14,810.22	13,380.90
Kingwood Oil Co., Okmulgee, Okla.	19,826.18	19,429.66
Kinnebrew & Simpson, Shreveport, La.	5,531.40	5,420.77
Kirby Petroleum Co., Houston	147,297.71	110,942.20
Kiser & Fleming, Albany	1,812.51	1,648.57
Kisk Oil Co., Wichita Falls	1,272.34	1,065.24
Kistler, Frank R., & Co., Inc., Littleton, Colo.	285.21	192.75
Kleiner, Charles J., Cisco	36,786.97	35,548.44
Kleiner, John H., Cisco	552.56	551.67
Kleinfelder, B. F., Breckenridge	206.41	192.85
Kluncke, George, trustee, Von Ormey	1,161.86	784.70
Knotts, Nona A. Wichita Falls	612.74	610.77
Knox, D. M., Graham	22,194.05	21,548.13
Knox, W. C., Kilgore	5,612.09	5,499.84
Koberg Oil Co., Oklahoma City	7,578.09	7,404.55
Koenig, Max W., Oakland, Calif.	11,706.56	7,492.20
Kohlman, Richard, Iowa Park	440.00	413.00
Kolp, C. F., Electra	14,031.96	13,301.71
Kolp, C. F., et al, Tyler	10,753.82	5,376.91
Kolp, C. F., et al, Tyler	10,566.28	10,354.95
Kurz Oil Co., Somerset	376.69	255.01
L		
Lackey, W. G., Co., Tulsa, Okla.	1,016.70	957.86
Lacey Petroleum Co., Longview	5,223.12	5,118.65
Laird, S. S., Kilgore	21,430.57	20,438.78
Lake Graham Oil Co., Houston	1,236.80	986.22
Lake View Oil Co., Sour Lake	9,620.92	7,608.33
Lampton, H. W., Winona	10,038.67	9,837.90
Landreth Production Corp., Fort Worth	78,273.57	49,696.51
Larcro Gas & Petroleum Co., San Antonio	31,356.02	25,084.82
Laredo Oil Co., Inc., Laredo	210.00	168.00
Lester, E. C., Henderson	7,483.93	7,170.71
Lawson, Eugene B., estate, Tulsa, Okla.	26,359.85	24,535.21
Lebow, C. H., Tulsa, Okla.	1,055.98	1,038.15
Lechner & Hubbard, Dallas	27,281.68	26,606.19
Leck Royalty & Oil Co., Fort Worth	117.31	84.35
Lee, Homer, Wichita Falls	9,343.32	9,058.58
Lee, T. W., Gladewater	5,017.95	4,917.59
Lee & Hankamer, Sour Lake	5,667.54	5,445.99
Lee & Phillips, Gladewater	11,756.39	10,194.53
Lee & Scott, Inc., Houston	1,839.48	1,471.58
Lee & Wilson, Houston	2,514.97	2,019.81
Lefors Petroleum Co., Lefors	15,244.31	11,932.27
Leiser-Rochmill Production Co., Fort Worth	482.76	577.98
Len-Cook Oil Co., Electra	223.88	214.91
Leonard Petroleum Co., et al, Washington, Pa.	34,729.83	34,035.21
Leonard, George, Somerset	963.05	725.19
Lesh & McCall, Nocona	40,477.00	36,245.96
Lesh, Kilcrease & Co., Nocona	1,538.00	1,168.88
Lesh, John L. & Co., Nocona	4,639.18	3,497.45
Lester & Duffield, Fort Worth	12,335.79	12,090.06
Letwin & Lippit, Fort Worth	31,302.00	29,877.58
Lewis, J. E., et al, Eastland	152.20	144.71
Lewis, J. E., & Co., Eastland	745.67	715.84
Lewis, Stanley, Oklahoma City	12,400.41	12,152.61
Lewis Production Co., Pittsburgh, Pa.	87,337.77	81,852.64
Lide-Rowe Oil Co., Shreveport, La.	27,871.60	20,913.47
Lide-Taylor Oil Co., Shreveport, La.	36,425.41	26,629.03
Lido Oil Co., Vernon	39,074.31	36,603.36
Linedo Oil Co., Lincoln, Neb.	517.83	414.26
Lindsay, R. W., Drilling Co., Graham	39,936.96	39,936.96
Lion Oil Refining Co., El Dorado, Ark.	414,446.80	306,757.11
Little Caesar Oil Co., Longview	5,912.37	5,794.12
Little, William, Pecos	5,805.38	3,773.50
Little, William, Breckenridge	96.00	84.45
Hamill, J. G., receiver for Lively & Bryan et al, Fort Worth	11,509.72	11,279.53
Lloyd, H. D., and Vari Olsen, receiver for Doty, McGee & Brown, Longview	7,463.15	7,313.89
Lockhart & Co., Los Angeles, Calif.	61,282.62	38,767.26
Lockhart, H. L., Gladewater	5,833.11	5,163.24
Loggie & Arendt Oil Co., Albany	1,312.60	1,151.38
Lone Pipe Oil Co., Tyler	8,041.61	7,880.77
Lone Pine Oil Co., Tyler	11,265.44	11,040.13
Lone Star Oil Co., Ardmore, Okla.	6,014.74	5,894.44
Lone Star Gasoline Co., Dallas	7,208.91	6,634.68
Lone Star Gas Co., Dallas	21,109.24	20,609.52
Long Oil Co., Henderson	3,299.92	3,233.92

Name—	Barrels	Value
Long, C. B., et al, Wichita Falls	295.60	261.42
Long, L. A., et al, Graham	29,934.03	29,360.08
Long, Roy, Oil Co., Navasota	1,187.65	745.61
Longview Investment Co., Longview	1,261.92	1,236.68
Louisiana Oil Refining Corp., Shreveport	92,005.39	73,139.22
Lowe, Delaney & Carter, DeLeon	1,482.23	1,369.46
Lowenstein Oil Co., Rockdale	722.51	433.51
Lucey Petroleum Co., Dallas	118,808.46	87,708.43
Luling Oil & Gas Co., San Antonio	33,844.06	30,815.06
Lytle, C. F., Mexia	7,099.27	6,409.63
M		
M-B-G Oil Co., Dallas	23,715.73	17,876.92
Mabee, J. E., Co., Tulsa	47,447.63	41,072.28
MacDermott, W. F., Fort Worth	489.46	458.72
MacKnold Co., San Antonio	88.00	62.07
Macmillan, Gordon, trustee, Tyler	13,145.02	12,882.12
Macmillan, Alfred, and Jim McMurrey, Longview	15,368.28	15,061.02
Madden, E. B., and H. W. Hunt, Olney	4,344.16	4,344.16
Madden, E. B., Olney	7,098.95	7,018.21
Madison Oil & Gas Co., Electra	2,219.35	2,219.35
Mahaney-Hill Petroleum Corp., Dallas	5,411.70	5,212.10
Mahaney, C. L., Oil Co., Dallas	3,048.97	2,795.03
Malernee-Bullock Oil Co., Oklahoma City, Okla.	6,279.03	6,435.91
Magnolia Petroleum Co., Dallas	3,368,717.04	2,949,577.04
Manahan Oil Co., Tulsa, Okla.	29,630.00	28,903.21
Manahan Oil Co., Tulsa, Okla.	6,386.00	6,084.07
Mann, Floyd, Graham	325.91	314.07
Mann & Forbes, Graham	1,863.41	1,804.49
Manson Oil Co., Chickasha, Okla.	21,268.50	20,843.13
Manziel, Bobby, Gladewater	5,398.54	5,290.70
Manziel, Bobby, Gladewater	2,363.54	2,316.27
Manziel, Bobby, Gladewater	5,550.14	5,440.15
Manziel, Joe, Gladewater	466.88	458.56
Marcell & Perkins, Olney	1,043.29	1,027.48
Welch, Chas., Margarett Oil Co., Albany	587.00	410.00
Margay Oil Corp., Tulsa, Okla.	58,007.09	56,555.18
Marine Corp., Dallas	40,043.50	39,078.71
Markham & Dunning, Fort Worth	22,331.58	19,149.34
Marlin Oil Syndicate, M. O. Shallow, receiver, Longview	5,226.22	5,121.74
Marnet Oil & Gas Co., Tulsa, Okla.	3,531.54	3,322.44
Marr, J. E. (Marr Drilling Co.), Tyler	5,396.96	5,215.23
Martin & Hamilton, Wichita Falls	2,708.29	2,666.52
Martin, Drake & Jones, Houston	15,108.49	12,186.78
Martin, F. W., & Co., Tulsa	2,636.91	2,584.16
Martin, H. W., San Bernardino, Calif.	18,298.62	11,584.19
Martin, N. H., Wichita Falls	8,472.81	7,601.15
Marts, E. R., Dallas	2,208.18	1,850.05
Massie, J. H., et al, Wichita Falls	16,385.97	16,058.15
Massie, J. H., Wichita Falls	39,018.90	38,318.11
Matthews, W. H., Longview	6,026.11	5,905.59
Maurich Oil Co., Tyler	5,721.33	5,606.91
Maxon, W. E., Jr., et al, Wichita Falls	22,738.40	19,416.40
Maxwell, J. C., Fort Worth	20,356.83	13,259.37
Mayberry, C. B., Co., Laredo	1,542.52	1,234.02
Mays, R., Fort Worth	629.93	629.93
McAlbert Oil Co., Inc., Houston	15,150.73	12,475.94
McBride, L. C., Dallas	4,887.93	4,789.87
McBride, Lawrence, Jr., receiver, Dallas	9,275.19	8,586.92
McBride, W. C., Inc., St. Louis, Mo.	4,091.68	3,390.13
McCamey, George B., Fort Worth	5,380.88	5,207.93
McCarter, R. C., Rising Star	1,063.73	938.32
McCarty Oil Co., Wichita Falls	46,508.48	45,568.75
McCarty, W. W., and Edward T. Martin, Wichita Falls	8,204.97	7,131.48
McCauley, Mrs. Claud, Somerset	553.34	330.96
McClanahan & Venable Oil Co., Tyler	57,207.28	56,063.12
McClanahan, D. E., Vernon	141.45	132.20
McClintock, J. G., Amarillo	7,193.00	5,168.75
McConnell, Will H., trustee, Tyler	5,424.85	5,316.35
McCutchin, Alex, Arp	13,942.04	13,663.20
McCutchen, C. E., trustee, Wichita Falls	4,283.33	4,196.86
McCurdy & Easter, McCamey	7,203.20	4,342.25
McDaniel Oil Corp., Cisco	2,019.83	2,019.83
McDaniel, D. B., Houston	121,075.63	96,431.87
McDonald Bros., Mount Pleasant	7,411.46	7,122.60
McDonald & Campbell, Dallas	25,649.73	24,441.78
McElvan, Rehgan, well No. 3 account, Pecos	1,873.43	1,217.73
McEntire, J. B., trustee, Tyler	5,421.20	5,531.83
McGinley Corp., Fort Worth	3,090.00	2,843.70
McIlroy Oil Co., Amarillo	20,170.79	15,169.66
McJunkin, Florence T., et al, Tulsa	293.94	293.36
McLester Oil Co., Eastland	8,058.72	7,866.60
McMahon, C. L., Tulsa	73,868.93	72,109.69
McMurray, Root & Rhodes, Eastland	512.00	512.00
McMurray, J. L., et al, Cisco	1,709.86	1,624.52
McNann Oil Co., Gladewater	5,070.95	4,948.86
McMurray & Fair, Inc., Tyler	11,226.60	11,002.08
McNallen & Griffin, Tulsa, Okla.	5,073.53	4,701.62
McNally, P. R., Corsicana	2,324.50	2,278.01
McNamara Oil Co., Beaumont	376.18	366.95
McCrary, E. W., Tulsa	4,029.42	3,563.42
Means, E. W., Borger	4,324.00	3,023.55
Means, J. C., Jr., Houston	12,128.66	11,594.11
Medina Oil & Gas Assn., San Antonio	58.20	36.99
Mendenhall Oil Co., Cisco	785.93	774.20
Menks, John G., Wichita Falls	639.03	639.03
Mennis, G. W., estate, First National Bank of Wichita Falls, trustee, Wichita Falls	3,852.47	3,507.91
Mercury Petroleum Corp., Fort Worth	10,950.56	10,591.44
Meredith & Gant, Wichita Falls	1,539.12	1,351.75
Meredith, J. D., Moran	1,974.00	1,622.49
Meridian Petroleum Corp. of Texas, Tulsa, Okla.	33,542.45	27,587.34
Merren, K. E., trustee, Shreveport, La.	51,484.03	40,448.59
Merren, K. E., Shreveport, La.	87,746.50	43,088.50
Merrick & Belcher, Wichita Falls	7,322.37	7,322.37
Merrick & Bristow, Ardmore, Okla.	17,819.85	9,890.06
Merrick & Goldsmith, Wichita Falls	1,930.34	1,832.12
Merrick & Lamb, Ardmore, Okla.	23,877.38	15,122.53
Merrick, F. W., Inc., Ardmore, Okla.	3,336.24	3,269.52
Merrick, John F., Wichita Falls	13,470.01	13,200.60
Messinger, C. S., et al, Royalty	1,531.31	856.42
Mid-Continent Petroleum Corp., Tulsa	12,167.25	11,480.61
Mid-Kansas Oil & Gas Co., Findlay, Ohio	2,351,758.62	2,274,154.65
Mid-Tex Production Co., Breckenridge	10,543.01	9,803.33
Midwest & Gulf Co. of Texas, Tulsa, Okla.	385.13	369.82
Paul L. Miller, Kilgore	27,484.22	26,743.05
Millikin, L. L., Burkburnett	275.31	240.29
Mills-Bennett Production Co., Houston	411,798.49	340,774.63
Mills & Gariety, Corsicana	2,210.35	1,769.28
Minntex Oil Corp., Wichita Falls	.....	467.25
Minnesota-East Texas Oil Co., Duluth, Minn.	5,433.34	5,324.68
Minor Oil Co., Beaumont	5,771.39	4,617.11
Milcham, G. F., Dallas	29,480.97	28,870.55
Mitchell, Frank A., Wichita Falls	1,544.29	1,469.39
Mohawk Oil Co., Tulsa	4,801.46	4,705.43
Mollberg, B. C., trustee, Austin	15,239.49	14,804.76
Montgomery, Rea-Montgomery, Sedwick	986.00	927.33
Moody Corp. (Lewis Fisher and J. W. Keeland, receivers), Houston	219,360.77	147,928.13
Moody-Seagraves Producing Co., Houston	144,294.80	121,753.48
Mook-Texas Oil Co., Fort Worth	21,777.52	21,167.64
Moore, E. H., Tulsa, Okla.	13,815.23	12,102.34
Moore, R. A., receiver for Rex Petroleum Corp., Orange	5,951.72	4,761.38
Moore, N. A., Eastland	286.49	274.13
Moran Co., Wichita Falls	7,096.82	6,655.93
Moran, E. J., Dallas	6,131.46	5,938.93
Moran, J. J., et al, Wichita Falls	3,493.49	3,169.59
Mordyan Petroleum Co., Pampa	15,697.53	13,476.78
Morgan, Ray, et al, Fort Worth	759.18	729.68
Morton, A. D., Tulsa, Okla.	6,607.82	6,409.14
Moses, E. I., Luling	821.00	615.78
Moss, H. S., Dallas	27,352.99	26,805.93
Moss, H. S., Special, Dallas	10,332.96	10,126.30
Moss & Urschel, Dallas	20,707.42	19,654.93
Moss, Urschel & Keys, Dallas	3,228.72	2,905.84
Mount & Lee, Inc., Wichita Falls	1,124.14	1,060.42
Moutray Oil Co., Abilene	3,164.76	2,500.28
Mudge Oil Co. of Texas, Pittsburgh, Pa.	69,125.28	66,934.19
Mues & MacDermott, Fort Worth	357.58	336.18
Mullendore, Berry & Berry, Cleveland, Okla.	36,030.88	35,310.27
Mullendore, Berry & Berry, Cleveland, Okla.	5,660.03	5,547.93
Munger, L. R., Dallas	15,563.45	13,967.37
Murchison Oil Co., Dallas	76,403.72	49,949.48
Murchison & Cranfill, Wichita Falls	859.26	856.86
Murphy, J. F., trustee, Sapulpa, Okla.	7,243.12	6,891.92
Murphy, J. F., trustee, Sapulpa, Okla.	5,721.21	5,606.78
Murphy, O. G., trustee, El Dorado, Ark.	24,477.39	23,731.18
Murphey-Rogers & Lanier, Marshall	5,709.53	5,500.56
N		
Nabob Oil & Gas Co., Amarillo	18,039.17	14,611.07
Nash & Strickland, Henderson	8,070.67	7,885.23
Nash & Windfohr Oil Corp., Graham	42,505.51	38,165.76
Nash Windfohr & Perry Austin	34,024.98	25,013.98
Nathan, Albert, Tulsa	5,967.61	5,764.45
National Oil Co., San Antonio	615.04	422.27
National Oil & Grease Co., Dallas	17,960.13	17,600.80
National Securities Oil Co. (J. F. Lucey, receiver), Dallas	8,549.42	8,378.43
Navarro Oil Co., Houston	175,159.53	161,037.89
Newport & Ohio, Petroleum Co., Newport, N. Y.	461.40	449.01
Neverson Oil Co., Mexia	7,295.76	7,295.76
Newton & Lillie, Goose Creek	16,850.44	13,480.35
Niola Oil Corp., Tyler	3,800.00	3,462.60
Newton-Palmer Oil Co., Rockdale	297.15	184.27
Noack Oil Co., Rockdale	844.99	522.97
Noack & Lanning, Rockdale	233.57	137.03
Noack & Lanning, Rockdale	2,003.49	1,128.00
Noack & Lanning, Rockdale	890.87	715.92
Northern Oil Co., Amarillo	4,647.23	3,311.49
North Fork Oil Co., Amarillo	4,086.07	3,297.99
Number Nine Oil Corp., Tulsa	1,909.07	1,786.57
Nutt & Gates, Wichita Falls	2,950.13	2,874.21
O		
O. A. Co., Laredo	929.17	743.35
O. W. R. Oil Co., Dallas	22,362.49	21,915.24
Roscoe F. Oakes and E. E. Combs, San Francisco, Calif.	22,587.05	21,742.38
Oasis Oil Co., Wichita Falls	45.57	43.74
W. O'Brien, Amarillo	758.73	549.56
O'Connell Oil Corp., Boston, Mass.	11,314.00	11,087.72
Octagon Oil Co., Tulsa, Okla.	15,513.14	15,202.88
Odom, T. L., receiver, Tyler	4,504.07	4,300.75
O'Hern, John J., Laredo	15,599.71	16,267.70
Oils, Inc., Oklahoma City, Okla.	11,404.91	11,176.82
Oldom, William P., Iowa Park	696.52	661.70
Oldom, William P., Iowa Park	416.65	416.65
Olsan Petroleum Co., Bristow, Okla.	11,892.44	9,215.13
O'Neil, I. P., Tyler	9,183.31	9,073.74
Olney, J. W., and Clark Sample, El Dorado, Ark.	33,700.05	31,786.39
Olney Oil & Refining Co., Wichita Falls	105.79	97.32
Omega Oil Co., Longview	1,045.32	1,024.41
Operators Royalty & Producing Co., Tulsa, Okla.	39,915.11	34,828.20
Orange Petroleum Corp., Orangefield	29,484.99	23,142.62
Oriental Oil Co., Dallas	6,058.34	5,845.31
Overton Refining Co., Inc., Overton	139,274.29	136,220.76
Owenwood Peel No. 3, J. W. Robins, trustee, Fort Worth	19,717.00	18,832.77
Owens, Sherwood B., Brownwood	1,204.67	1,197.22
Owen-Sloan Oil Co., Tulsa	38,561.53	24,404.43
P		
Pace, George L., Dallas	17,272.76	16,380.80
Pace Petroleum Co., Chas. H. Allen, trustee, Oklahoma City	5,360.86	5,253.64
Pace & Ward, Breckenridge	315.94	7 81.54
Palm City Oil Co., McAllen	153.89	125.51
Palm, F. N., Moran	648.05	531.38
Palmer, Freddie, Oil Co., Rockdale	145.73	73.44
Palmer & Burch, Inc., Wichita Falls	5,645.34	5,303.24
Panhandle & Santa Fe Railway Co., Wichita, Kans.	3,619.57	2,303.86
Panhandle Refining Co., Wichita Falls	74,246.85	69,040.31
Pansota Oil Co., Amarillo	3,108.95	2,424.98
Paraffine Oil Co., The, Houston	9,847.20	7,766.20
Patterson Drilling Co., W. M. Preston, receiver, Dallas	5,966.48	3,811.07
Patrick Production Co., Dallas	3,688.00	3,614.35
Pearce & Moore, Tyler	3,045.20	7,783.99
Pearson Oil Co., San Antonio	96.00	57.60
Pecos Crude Oil Purchasing Co., San Angelo	1,849.20	976.83
Perry, Thos. N., Wichita Falls	11,633.05	11,444.13
Pelican Natural Gas Co., Inc., Shreveport	98,000.18	51,333.68
Pemeta Oil Co., Fort Worth	2,815.82	2,720.79
Penn Oil Co., Dallas	10,989.90	7,432.44
Pennowa Oil & Gas Co., Skiatook, Okla.	7,855.31	5,878.17
Perkins & Cullum, Wichita Falls	70,185.18	68,239.83
Perkins & Snider lease, Wichita Falls	2,572.78	2,515.49
Permian Oil Co., and Gibson & Johnson, Inc., Fort Worth	2,382.71	2,344.54
Perren & Fell, Dallas	26,044.15	25,153.41
Perry, E. Edmund, Shreveport	11,459.14	11,197.64
Peter, H. W., Wichita Falls	237.20	237.20
Petroleum Finance Corp. of Texas, Longview	48,548.91	47,577.92
Petroleum Investment Co., Wichita Falls	2,691.50	2,630.69
Petroleum Marketing Corp., Houston	40,087.35	39,285.59
Petroleum Producers Co., Wichita Falls	81,001.03	78,628.65
Petroleum Producers et al, Wichita Falls	3,889.50	3,882.51
Pettit Oil Corp., Trees, La.	479.30	479.30
Peyton Bros., Mexia	13,579.32	13,307.73
Phillips Petroleum Co., Bartlesville, Okla.	26,018.66	23,680.15
Phillips Petroleum Co., Bartlesville, Okla.	60,111.93	38,198.56
Phillips Petroleum Co., Bartlesville, Okla.	13,331.85	8,533.39
Phillips Petroleum Co., Bartlesville, Okla.	24,359.14	15,497.01
Phillips Petroleum Co., Bartlesville, Okla.	25,760.93	16,652.57
Phillips Petroleum Co., Bartlesville, Okla.	76,210.10	48,739.86
Phillips Petroleum Co., Bartlesville, Okla.	111,801.32	100,695.25
Phillips Petroleum Co., Bartlesville, Okla.	26,041.38	25,575.92
Phillips Petroleum Co., Bartlesville, Okla.	816.71	810.38
Philips Petroleum Co., Bartlesville, Okla.	9,123.12	8,857.49
Phillips Petroleum Co., Bartlesville, Okla.	3,769.46	3,586.93
Phillips Petroleum Co., Bartlesville, Okla.	14,404.65	13,855.07
Phillips Petroleum Co., Bartlesville, Okla.	5,871.40	5,719.81
Philips Petroleum Co., Bartlesville, Okla.	976.48	976.48
Phillips Petroleum Co., Bartlesville, Okla.	4,488.42	4,487.17
Phillips Petroleum Co., Bartlesville, Okla.	8,426.56	8,426.56
Phillips Petroleum Co., Bartlesville, Okla.	201,879.52	171,231.76
Phillips Petroleum Co., Bartlesville, Okla.	1,214.64	850.25
Philips Petroleum Co., Bartlesville, Okla.	2,233.00	1,965.04
Phillips Petroleum Co., Bartlesville, Okla.	449,240.83	317,890.13
Phillips, B. F., Gladewater	18,497.13	18,127.18
Phillips & Bennett, Mexia	5,144.05	4,992.97
Phillips, J. R., and J. J. and Thos. Currie, Amarillo	1,812.28	1,062.45
Philmack Oil Co., Tyler	9,279.02	8,954.25
Philip Bros., Beaumont	2,860.65	2,273.74
Pilot Oil Co., Dallas	106,298.05	104,061.09
Pine Grove Oil Co., Tyler	15,347.43	14,822.05
Pine Lodge Oil Co., Inc., Houston	1,618.12	1,585.75
Piner, R. T., Big Spring	158.51	158.51
Piney Oil & Gas Co., New York City	2,457.81	1,672.68
Pioneer Oil & Gas Refining Co., Danville, Ill.	840.08	613.00
Piper, L. E., trustee, Vernon	1,275.16	1,258.13
Pittman Oil Corp. of Texas, Fort Worth	16,766.00	15,837.62
Pitzer & West, Breckenridge	20,844.36	19,693.78
Pivito, M. E., Sour Lake	4,598.06	3,779.91
Plummer, Albert, Houston	11,423.27	11,194.80
Plummer & McDaniel, Houston	5,296.79	5,190.85
Plymouth Oil Co., Pittsburgh, Pa.	54,609.06	34,643.83

Name—	Barrels	Value
Pointer Oil Co., Waco	11,078.52	10,856.94
Pois, M., et al, Wichita Falls	2,802.61	2,765.01
Pois, Fine & Schulz, Wichita Falls	447.49	438.50
Pollard, W. E. and C. E., Pampa	3,300.86	2,818.14
Poole, B. O., Batson	1,353.49	1,082.79
Pope, Ernest, Saratoga	672.33	537.87
Porterfield, R. R., Tyler	3,047.25	2,874.74
Portland Drilling Corp., Wichita Falls	479.80	463.60
Postelle, J. F., et al, Fort Worth	3,194.90	2,047.40
Powell & Irion, Inc., Gladewater	16,808.31	16,113.08
Powell, J. L., estate, Wichita Falls	266.38	255.71
Powers Production Co., Houston	37,982.77	31,905.91
Pratt, D. C., Mineral Wells	1,891.00	1,753.49
Pratt, Thos. H., Brenham	400.00	290.00
Premier Oil Corp. (R. O. Kniveton, receiver), Tyler	10,569.52	10,393.49
Price, Russell & Co., Ranger	2,856.82	2,782.48
Prichard, L. H., Oklahoma City, Okla.	4,500.28	4,410.27
Primrose Oil Co., Sour Lake	523.12	418.49
Prince Brothers Drilling Co., Electra	11,865.16	11,627.87
Prine, J. C., Mobile, Ala.	5,508.26	4,919.02
Proctor, George, Wichita Falls	11,357.02	11,357.02
Producers Drilling Co., Wichita Falls	1,130.45	1,077.15
Producers & Refiners Corp., Independence, Kans.	2,808.37	2,592.75
Producers Supply & Tool Co., Marietta, Ohio	18,181.30	17,770.41
Professional Oil Co., Waco	8,557.50	8,372.79
Professional Oil Co., Waco	5,805.01	5,688.91
Pugh-Hickman Drilling Co., Inc., Shreveport, La.	28,832.74	28,309.83
Pure Oil Co., Chicago, Ill.	3,534,931.11	3,052,994.85
Pure Oil Co., Chicago, Ill.	785,409.94	667,295.07
Putnam Oil Co., Tulsa, Okla.	25,675.32	23,617.60
Py-Tex Oil Co., Winchester, Ky.	301.77	301.75
Q		
Quad Corp., Dallas	19,643.48	19,250.62
Quick Sand Oil Co., Borger	10,395.00	8,804.28
Quinan, H. W., Yreka, Calif.	543.00	378.24
Quincy Oil Co., Vernon	131.83	131.33
R		
Raisin Brothers, Chickasha, Okla.	6,535.13	5,088.29
Rajo Oil Corp., Fort Worth	21,190.88	20,767.05
Ramming, Staley & Ramming, Wichita Falls	343.40	311.76
Ramming, R. W., Wichita Falls	137.83	136.48
Ramming, W. F., Wichita Falls	65.76	64.44
Ramsel, W. T., Oil Co., Rockdale	1,126.37	705.46
Rancho Oil Co., Fort Worth	63,642.82	61,345.20
Randall, W. S., San Antonio	5,279.49	4,514.64
Ranell Oil Co., Oklahoma City, Okla.	3,192.04	2,765.18
Ransom, M. W., trustee, Shreveport, La.	3,855.55	3,778.44
Ratliff, R. H., receiver, P. M. Rowland et al, Colorado	2,128.12	1,930.16
Ray & Miller, Dallas	6,832.36	6,695.71
Ray, George B., Tyler	28,950.10	28,371.10
Reaves, J. G., Tyler	5,842.97	5,726.12
Reclamation Co., Fort Worth	2,788.32	2,565.22
Rector & Davidson, Dallas	5,831.09	5,714.47
Red River Oil Co., Tulsa, Okla.	19,646.08	18,863.28
Red Star Oil Co., McAlester, Okla.	30,922.97	30,126.36
Redick & Hughes Oil Co., Tyler	5,396.42	5,288.49
Reed, W. M., Breckenridge	781.86	678.04
Reed, Crenshaw & Glass, Nowata, Okla.	4,845.76	4,705.23
Reeder & Scarborough, Wichita Falls	1,708.82	1,694.65
Reeves, Riley & Reeves, Gouldbusk	75.00	75.00
Refugio Oil Corp., Houston	6,447.16	6,167.98
Regan, J. T., Rising Star	1,166.77	1,001.17
Reinhart, M. J., trustee, Oklahoma City, Okla.	306.83	294.56
Reno Oil Co., Sisterville, W. Va.	38,173.48	37,326.81
Rentex Oil Co., San Antonio	5,826.82	4,411.26
Republic Production Co., Houston	452,520.27	380,027.32
Republic Supply Co., Houston	14,583.33	11,866.45
Reserve Petroleum Co. of Texas, Tulsa, Okla.	4,175.21	4,091.70
Reserve Petroleum Co. of Texas, Tulsa, Okla.	24,128.70	23,646.12
Retail Drilling Co., Henderson	11,445.87	11,216.95
Rex-Tex Oil Co., Winchester, Ky.	301.77	301.75
Reynolds, Roy A., Fort Worth	6,122.79	5,866.07
Reynolds, Roy A., Fort Worth	6,207.03	6,082.90
Reynolds, Roy A., Fort Worth	5,219.02	5,114.64
Rathke Oil Co., Wichita Falls	15,533.36	15,365.79
Rhodes & Highera, Breckenridge	11,577.73	11,206.56
Rhodes, Highers & Christie, Breckenridge	94.34	81.87
Ribble, O. C., South Bend	240.20	229.79
Richmond Drilling Co., Texon	2,470.48	1,543.73
Richardson & Keisey, Fort Worth	51,064.54	33,191.86
Riggs, E. R., Graham	25,945.80	25,803.39
Right of Way Oil Co., Fort Worth	553.20	501.50
Riner & Bailey, Wichita Falls	15,768.77	15,589.35
Riner & Omohundro, Wichita Falls	7,143.06	6,961.47
Rio Bravo Oil Co., Houston	259,049.36	215,122.57
Roy & Riner, Wichita Falls	7,009.39	6,869.19
Risinger, M., Mansfield, La.	5,145.29	5,042.39
Rixford, S. J., et al, Grand Falls	1,613.33	1,048.69
Robbins, John C., Sr., et al, Longview	5,796.87	5,680.90
Robert Oil Corp., Breckenridge	36,917.61	35,965.72
Roberts, H. W., Wichita Falls	1,526.54	1,476.80
Roberts, J. I., Production Co., Longview	5,630.65	5,445.57
Robertson, R. R., Wichita Falls	3,267.84	2,942.92
Roberson, O. D., Pittsburgh, Pa.	953.02	795.70
Robinson, Arthur D., Dallas	26,906.42	25,384.28
Robinson, J. B., Sour Lake	.....	.....
Rochmill, Henry, trustee, Fort Worth	622.00	585.67
Rock Creek Oil Corp., Amarillo	6,360.33	4,079.63
Rockdale Junior Oil Co., Rockdale	73.73	48.66
Rockwell, J. A., & Co., Warren, Pa.	1,488.59	1,416.42
Rockwood Oil Co., McAlester, Okla.	5,821.29	5,699.75
Rocky Mountain Oil Co., Longview	12,674.22	12,098.27
Roeser & Pendleton, Inc., Fort Worth	348,666.25	336,825.36
Roeser, W. H., Inc., Fort Worth	4,886.57	3,871.59
Rogers, Dan D., Dallas	5,273.62	5,168.13
Rolyat Production Co., Houston	4,079.54	3,093.87
Root, C. M., Eastland	5,402.00	5,110.00
Root & Fehl, Eastland	1,549.00	1,383.00
Root & Rhodes Oil Co., Eastland	7,380.00	7,079.00
Root, Rhodes, Gilman & McMurray, Eastland	3,334.00	3,218.00
Rose, Robert, San Antonio	109,125.97	81,844.49
Rose Tex Oil Co., Rosenberg	596.97	477.57
Ross, Dwight M., Wichita Falls	988.87	975.70
Roth & Faurot Oil & Gas Co., Independence, Kans.	2,845.97	2,651.35
Roundtree & Caudle, Rockdale	337.42	202.45
Rowan & Bristow, San Antonio	18,489.53	18,119.74
Rowan Nichols Oil Co., Fort Worth	23,526.92	22,844.72
Rowe, J. G., Wichita Falls	2,845.25	2,761.63
Royal Petroleum Corp., Dallas	4,899.00	4,801.82
Royal Petroleum Corp., Dallas	5,295.00	5,189.16
Rubsam & Hunter, Wichita Falls	3,412.19	3,286.11
Rusk Crude Oil Co. and Phoenix Crude Petroleum Co., Birmingham, Ala.	12,955.03	12,695.93
Rushing, Dr. J. S., Longview	59,174.49	38,790.21
Russell, Frank, Kilgore	6,017.23	5,896.89
Russell & Wilson, Wichita Falls	6,198.32	5,286.67
Rutherford, Pat, receiver, Refugio	25,460.63	24,500.77
Ruston Drilling Co., Inc., Ruston, La.	19,228.11	18,719.53
Ruyle Farm Oil Co., Wichita Falls	5,114.07	4,949.78
Ryan Consolidated Petroleum Corp., Tulsa, Okla.	45,944.97	39,514.48
Rycade Oil Corp., Houston	14,468.75	11,854.18
Ryman, J. Nye, trustee, Gladewater	5,540.76	5,289.23
S		
S. R. & C. Oil Corp., San Antonio	95,290.02	76,331.88
S. & W. Oil Co., Amarillo	3,527.54	2,328.18
Sabinas Oil Corp., Longview	93,826.91	91,137.65
Saigh, N. A., San Antonio	717.18	542.95
Sakaba Oil Corp., Inc., Shreveport, La.	27,327.58	26,448.55
Salado Oil Co., San Antonio	1,315.08	1,019.94
Salmon Oil Co., Dallas	5,535.00	5,424.30
Samson, H. G., Fort Worth	14,972.46	14,651.98
San Diego Oil Corp., San Antonio	6,621.40	5,297.11
Sand Creek Oil Co., Amarillo	1,582.00	395.50
Sandefer-Atkinson-Daniel Oil Corp., Breckenridge	1,982.97	1,895.23
Sanford Co., Inc., Tyler	6,050.00	5,728.76
Saratoga Oil Co., Wichita Falls	570.41	566.31
Satellite Oil Co., Tulsa, Okla.	22,443.21	21,599.93
Savoy Oil Co., Tulsa, Okla.	10,461.48	6,687.70
Sawyer, W. G., Brownwood	1,446.38	1,446.38
Saxet Oil Co., Houston	143,215.00	118,563.52
Sayre Oil Co., Wilmette, Ill.	40,853.29	39,825.50
Scarborough, W. A., Burkburnett	832.09	780.70
Schaffner, E. N., Cross Plains	519.53	398.27
Schaffner & Wilson, Cross Plains	979.57	971.59
Schermerhorn Oil Co., Tulsa, Okla.	76,082.20	47,942.80
Schermerhorn-Winton Co., Tulsa, Okla.	61,154.48	39,179.93
Schlaffke & Blair, Electra	14,393.36	14,393.36
Schlaffke, Edward, Electra	83.36	78.35
Schlicher Oil Co., Beaumont	458.96	367.17
Schmitt, A. H., and S. P., Fort Worth	9,512.00	9,455.42
Schoolfield, R. E., Wichita Falls	287.33	256.35
Schroeder, T. S., Dallas	15,357.00	15,050.32
Schultz & Weaver, Wichita Falls	14,510.34	14,206.94
Scott & Britton, Graham	99.80	95.72
Scott & Nance, Graham	1,693.91	1,610.07
Scott & Walker, Albany	2,591.20	2,396.75
Sea Gull Oil Co., Tyler	2,425.73	2,171.93
Section 92, Production Account, Pecos	4,388.50	2,791.91
Sedwick Oil Co., Tulsa, Okla.	4,564.83	4,105.61
Seitz, Commegys & Seitz, Inc., Wichita Falls	2,145.02	2,111.33
Selby Oil & Gas Co., Tulsa, Okla.	128,331.18	122,423.36
Sells Petroleum, Inc., Tyler	27,629.56	26,971.79
Senter, E. G., Jr., Dallas	155.50	155.50
Sentinel Oil Corp., Dallas	5,921.01	5,736.99
Sequoia Oil Co., Fort Worth	192.57	120.36
Sequoia Oil Co., Fort Worth	7,315.52	4,627.14
Sessions, W. L., and I. L., Dallas	9,464.02	9,274.74
Seybert Brothers, Mooringsport, La.	3,051.89	3,051.89
Shaffer, J. C., and Margaret L., Coleman	4,832.87	4,045.47
Shamrock Oil & Gas Co., Amarillo	154,232.10	116,889.03
Shankle-Newton Oil & Gas Co., Inc., Laredo	27,888.58	22,918.95
Shano Oil Co., Longview	35,849.64	35,132.64
Shappell Oil Co., Wichita Falls	28,943.14	28,343.77
Shasta Oil Co., Longview	68,346.13	66,775.86
Shaw Oil Co., Dallas	38,221.08	36,974.50
Sheffield Oil Co., Houston	3,509.91	2,758.28
Shelburne, Sam P., Oklahoma City, Okla.	10,993.06	10,773.20
Shell Petroleum Corp., St. Louis, Mo.	5,357,607.51	4,561,696.08
Sherman Oil & Gas Co., Sherman	1,240.54	766.17
Shertzer, John, Cisco	.....	358.73
Shertzer Brothers, Dewey, Okla.	.....	8,370.67
Shiloh Oil Co., A. L. Brin, trustee, Dallas	5,971.28	5,851.85
Shoreline Oil Co., Mount Pleasant	6,978.39	6,698.86
Showalter, Russell, Fort Worth	5,233.38	5,128.71
Sikes, Louis, Tyler	29,278.70	28,693.11
Silver Star Oil Co., McAlester, Okla.	21,911.23	19,802.17
Simmons, T. K., Tulsa, Okla.	1,401.41	1,271.93
Simms Oil Co., Dallas	705,881.22	518,564.52
Simplex Oil Co., Inc., Shreveport, La.	6,070.43	5,818.58
Simpson, O. H., Fort Worth	551.82	541.26
Simpson-Fell Oil Co., et al, Ardmore, Okla.	5,607.00	4,773.77
Sinclair Prairie Oil Co., Houston	209,775.04	171,726.47
Sinclair Prairie Oil Co., Tulsa, Okla.	2,239,119.76	2,080,243.69
Sink, Joel, Corsicana	129.00	123.00
Sipe Springs Oil Co., Tulsa, Okla.	3,132.30	2,941.11
Sircouich, A., and Mrs. F. M. Thomas, Putnam	435.28	330.79
Skelly Oil Co., Tulsa, Okla.	462,193.93	360,996.98
Sklatex Petroleum Co., Amarillo	18,371.39	13,726.72
Skipper Bivens Oil Co., Longview	11,921.78	11,614.76
Skipper, B. A., Oil Co., Inc., Longview	5,462.65	5,353.39
Skinner, E. W., Oil Co., Saratoga	3,533.71	2,820.16
Slick-Seeligson, Inc., Oklahoma City, Okla.	40,844.86	42,395.86
Slick, Homer, Cisco	733.49	652.72
Smith-Bohlsen Oil Co., Houston	5,560.13	5,381.31
Smith County Oil & Gas Co., Longview	5,490.04	5,380.25
Smith, McIntosh & Thomas, Cameron	743.26	467.91
Smith, McIntosh & Thomas (Henry lease), Cameron	432.50	271.22
Smith Salvage Co., Houston	962.32	654.36
Smith & Strouss, Dallas	2,678.55	2,624.98
Smith & Ash, Wichita, Kans.	23,913.98	20,721.95
Smith & McDonald, Electra	15,448.63	12,305.66
Smith, E. L., Oil Co., Inc., Mexia	109,238.32	91,561.14
Smith & Torrans, Tyler	19,059.71	18,405.11
Smith, H. R., Inc., et al, Luling	5,500.43	5,390.42
Smith, Guerin & King, Tyler	1,300.40	1,274.39
Smith, C. R., Ella Buffington, et al, Grand Falls	1,483.90	905.42
Smith, H. R., Inc., Luling	41,377.94	40,454.90
Smith, Mrs. J. L., Amarillo	3,718.32	2,794.84
Smith, J. R., properties, M. O. Swallow, receiver, Longview	18,536.68	17,971.81
Smith, Rex D., Burkburnett	331.00	317.74
Smith, W. Claude, San Antonio	2,299.34	2,161.35
Sneed Brothers, Tulsa, Okla.	11,993.29	11,606.02
Snowden & McSweeney Co., New York, N. Y.	98,012.74	94,284.32
Snyder, W. C., et al, Ben Greer, No. 1 F. G. Penn Survey, Gregg County, Texas, Tyler	6,164.36	6,050.98
Snyder, W. C.-Ben Greer, Tyler	7,132.82	5,920.24
Snyder, B. L., Dallas	4,789.21	4,683.62
Somerset Crude Oil & Refining Co., Somerset	2,184.85	1,500.45
Somerset Oil Co., San Antonio	802.82	544.10
Sonbar Corp., The, El Dorado, Ark.	23,836.21	23,249.88
South Oil Co., The, Rosston, Ark.	73.93	57.49
South Shore Oil Co., Houston	3,513.99	2,811.20
South Texas Oil Co., Laredo	898.75	808.88
South Texas Petroleum Co., Houston	65,148.77	65,002.61
Southern Petroleum Exploration, Inc., Sisterville, W. Va.	32,323.20	28,017.48
Southern Drilling & Production Co., Bay City	3,427.74	2,982.14
Southern Oil & Production Co., Eastland	1,727.77	1,601.37
Southern Oil Corp. of America, Winfield, Kans.	12,307.98	9,955.12
Southern Petroleum Corp., Houston	2,386.26	1,980.60
Southern Production Corp., El Dorado, Ark.	12,030.44	11,521.11
Spandsco Oil & Royalty Corp., Dallas	39,885.79	37,917.66
Speed, C. D., Corsicana	241.91	232.22
Spencer, H. E., trustee, St. Louis, Mo.	555.17	520.63
Spencer, H. H., & Co., Burkburnett	162.10	154.15
Sprague Oil Co., Ardmore, Okla.	6,252.07	3,627.82
Staley, J. A., Wichita Falls	1,619.65	1,455.90
Standard Oil Co. of Kansas, Wichita, Kans.	53,841.35	52,106.94
Standard Pipe & Supply Co., Dallas	8,692.06	8,376.40
Stanolind Oil & Gas Co., Tulsa, Okla.	.....	227.06
Stanolind Oil & Gas Co., Tulsa, Okla.	3,307,313.33	1,943,728.56
Stansylvania Oil & Gas Co., Amarillo	6,406.77	4,780.43
Stantex Petroleum Co., Oklahoma City, Okla.	10,319.76	10,033.79
Starr Drilling Co., Wichita Falls	12,856.71	12,779.84
Stark, W. H., Orange	655.76	524.71
Starnes, C. R., et al, Gladewater	4,809.00	4,712.82
States Oil Corp., Eastland	35,391.21	32,840.22
Steen Drilling, Inc., Duncan, Okla.	27,507.97	26,763.16
Stekoll, Harry, Tulsa, Okla.	27,507.70	18,496.30
Stella Oil Co., Beaumont	10,691.29	8,537.00
Stephens Oil Co., Sour Lake	591.30	473.04
Stewart Holding, Inc., Tyler	7,188.89	7,045.11
Stewart & Duffy, Tyler	4,973.88	4,848.42

Name—	Barrels	Value
Strickland & Mullins, Henderson	1,370.00	1,342.60
Stidham & Thrasher, Tyler	6,766.66	6,631.32
St. Marys Oil & Gas Co., St. Marys, W. Va.	32,486.19	25,674.96
Stock, H. L., Cisco	1,318.39	1,263.74
Stoops, J. P., Ranger	327.73	304.90
Storey, Friebele, Duffey Oil Co., McClintic lease, Winston-Salem, N. C.	20,822.00	13,200.03
Storey, Frieble, Duffey Oil Co., Cowden lease, Winston-Salem, N. C.	17,169.00	10,936.98
Storey, Frieble, Duffey Oil Co., Stella Dewell lease, Winston-Salem, N. C.	2,761.00	1,765.74
Stovall, E. C., & Sons, Graham	21,368.07	20,241.95
Strake Oil Corp., Houston	4,340.82	4,512.47
Stratton, Ed F., Pioneer	349.32	219.34
Straughan & Texannati, Mertzon	743.09	575.58
Streiskey, Joe, and Hefley, Rockdale	334.00	148.09
Stroube & Stroube, Corsicana	78,154.69	73,199.94
Sturm-Nolen Drilling Co., Grandfalls	5,370.50	5,440.32
Suloch Oil Co., Amarillo	5,370.09	2,359.68
Summerfield Oil Co., Tulsa, Okla.	122.80	110.68
Summit Drilling Co., Tulsa, Okla.	19,686.00	19,291.30
Sun Oil Co., Dallas	1,840,993.51	1,626,932.38
Wright, C. H., receiver, Sunray Oil Co., Tulsa, Okla.	83,355.92	65,805.34
Superior Oil Co., Dallas	113,008.98	110,193.77
Supreme Oil Co., Orange	1,670.28	1,336.23
Swain, Wilson, Woodson	728.00	560.56
Swanner, John L., Wichita Falls	773.93	742.96
Swearingen Oil Co., San Antonio	2,372.38	1,825.25
Swearingen, W. R., et al, San Antonio	4,734.91	3,658.03
Syndicate Oil Corp., Rochester, N. Y.	164.29	164.29
T		
Tannehill, L. B., Albany	22,314.50	21,090.11
Tarver, A. H., Shreveport, La.	96,764.36	47,517.03
Tarver, J. A., Inc., San Antonio	4,109.89	2,054.95
Taubert & McKee, Tyler	13,466.50	13,186.51
Taxman, J. J., and M., Refining Co., Wichita Falls	7,623.37	7,470.91
Taxman, Maynard, and E. S., Wichita Falls	4,497.66	4,493.54
Taylor-Link Oil Co., Houston	40,601.96	26,163.37
Taylor-Sibley Syndicate, Dallas	1,363.18	1,363.18
Teatsorsh, L., et al, Eastland	857.00	834.95
Teci Production Co., Sayre, Okla.	1,488.00	1,363.23
Teddlie, J. E., Liberty	4,355.00	3,498.63
Tegler, F. E., San Antonio	60.00	30.00
Tex-Cat Oil Co., Brownwood	2,585.96	2,460.86
Tex-Jersey Oil Corp., Tyler	29,902.54	28,577.57
Texacal Oil & Gas Co., Glendale, Calif.	125.88	117.03
Texas Consolidated Oil Co., San Francisco, Calif.	12,677.49	11,125.13
Texas Electra Co., Newark, Ohio	210.61	209.58
Texas Fidelity Oil Corp., Louisville, Ky.	2,817.18	2,640.71
Texas Gas Co., Houston	13,134.24	10,507.39
Texas Oil Industries, Brownwood	58.83	49.46
Texas Pacific Coal & Oil Co., Thurber	217,293.24	176,536.03
Texas Pacific Coal & Oil Co., Thurber	87,040.22	81,799.42
Texas Petroleum Co., San Antonio	29,984.66	19,528.54
Texas Petroleum Development Co., Cameron	2,568.51	1,591.51
Texas Seaboard Oil Co., Dallas	874.46	856.97
Texas State Oil Co., Dallas	5,945.41	5,835.32
Texas Trading Co., Tyler	5,760.13	5,644.93
Texas Unity Oil Co., Houston	6,054.32	5,939.45
Texnia Oil Co., Wichita Falls	6,528.47	6,378.87
Texon Oil & Land Co. of Texas, Fort Worth	38,010.14	24,113.51
Texon Oil & Refining Co., Fort Worth	19,142.27	16,782.21
The Texas Company, Houston	3,087,167.65	2,681,983.03
Thaxton, Nannie S., executrix, W. H. Thaxton estate, Austin	311.21	297.19
Theis Oil Co., Sour Lake	2,710.90	2,123.22
Tjoas, J. A., Burkburnett	415.32	353.32
Thomas, Sam, trustee, Marshall	4,357.91	4,580.38
Thomas & Tarver, Inc., San Antonio	101,037.09	81,517.67
Thomason & Fitzsimons, Shreveport, La.	5,915.70	5,757.39
Thomasson, E. M., & Co., Denver, Colo.	205.92	194.94
Thompson, J. E., Humble	460.00	368.00
Thompson, R. E., receiver, Dallas	5,390.58	5,282.77
Thompson & Beene, Groesbeck	5,922.93	5,804.47
Thurber, C. J., Iowa Park	303.00	256.65
Tidal Oil Co., Tulsa, Okla.	1,063,140.30	1,015,829.53
Tidnee, H. L., trustee, Graham	766.92	726.32
Tidnell, R. V., trustee, Graham	3,992.02	3,894.58
Tillon, Elvin, et al, Houston	3,656.41	2,925.13
Timblin, W. E., Wichita Falls	157.13	157.13
Timms, Evelyn T., Amarillo	3,818.61	2,974.67
Timms Dietach Oil Corp., Amarillo	3,451.99	2,684.36
Timms Fogarty Oil Corp., Amarillo	315.49	215.81
Timms, L. W., Oil Corp., Amarillo	3,618.46	2,804.24
Timms Robinson Oil Corp., Amarillo	1,085.89	835.32
Timms, Sutphen Oil Corp., Amarillo	391.20	290.63
Tow & Wolf, Eastland	954.39	847.23
Towns, M. K., Luling	8,228.19	6,038.20
Trapp, M. E., Oklahoma City, Okla.	10,339.40	10,622.61
Travelers Oil Co., Amarillo	8,224.65	6,133.78
Traylor-Rutherford Oil Corp., Refugio	18,100.75	14,386.25
Treat, E. M., Oil & Gas Co., Pittsburgh, Pa.	673.86	619.95
Trevino Oil Corp., Laredo	35,016.76	27,824.37
Triangle Oil & Gas Co., Rockdale	532.96	336.36
Triangle Petroleum Corp., Fort Worth	1,838.64	1,793.30
Triangle Petroleum Corp., Fort Worth	630.06	606.02
Trico Oil Co., Dallas	32,818.82	32,162.42
Trimount Petroleum Co., Shreveport, La.	4,542.92	4,502.62
Trinity Production Co., Wichita Falls	142.95	141.40
Tripplehorn, D. R., Pampa	8,769.07	7,716.78
Tucker, Art, Graham	1,614.00	1,276.64
Tucker, W. B., Dallas	11,624.21	11,391.56
Tucker Oil Co., Wichita Falls	71,255.08	64,082.53
Tule Lake Oil Co., Corpus Christi	1,530.00	1,147.50
Turman Oil Co., Tulsa, Okla.	156,554.08	153,226.06
Turman, L. C. (W. E. Allen, receiver), Fort Worth	14,783.50	9,476.53
Turner, W. F., Longview	28,405.80	27,837.68
Turner, R. C., Loving	12.68	12.68
U		
Unacre Oil Co., San Angelo	5,842.20	5,372.56
Underwood Drilling Co., Wichita Falls	1,335.60	1,312.84
Underwood Drilling Co., Wichita Falls	1,663.08	1,599.24
Underwood Drilling Co., Wichita Falls	1,211.15	1,162.69
Underwood Drilling Co., Wichita Falls	2,383.67	2,268.66
Union Oil Co. of Nevada, Los Angeles, Calif.	467.25	436.42
Union Oil & Mining Co., Tulsa, Okla.	3,794.82	3,384.72
United Crude Oil Corp., Amarillo	11,976.76	9,744.62
United North & South Development Co., San Antonio	109,279.16	81,959.37
United Oil Corp., Wichita Falls	5,839.51	5,654.41
United Producers Co., Wichita Falls	29,055.03	28,695.64
United Production Corp., Houston	523,382.04	480,846.27
Unity Oil Co., Beaumont	10,245.00	8,221.00
University Lease, Sec. 24 Pecos County, San Angelo	2,169.21	1,409.99
Upchurch & Co., Tyler	11,068.93	10,847.55
Upland Oil Co. and Cady, Conner & Crenshaw, Tulsa, Okla.	8,154.64	6,444.49
Urban et al, Ranger	540.82	520.72
Urban, Andrew, Abilene	528.00	410.70
V		
V. O. E. Refining Co., Gladewater	16,940.00	16,601.20
Van Cleave Trust, Baltimore, Md.	385.30	340.51
Van Wormer, F. E., Wichita Falls	3,214.88	3,163.45
Vaughn, G. H., Dallas	38,189.54	37,155.58
Ventura Oil Co., Wichita Falls	5,311.23	5,076.79
Vigil Oil & Gas Co., Wichita Falls	3,745.77	3,496.21
Violet Oil Corp., Corpus Christi	5,206.40	4,142.90
Vireca Corp., Houston	5,214.39	5,110.10
Virginia Oil & Ref. Co. (B. K. Isaacs, trustee), Fort Worth	22,988.54	22,132.28
Virginia Oil Ass'n, Inc., Fort Worth	1,734.76	1,731.87
Vise, R. H., Dallas	17,314.87	16,945.38
W		
Waco Oil Co., Waco	136.50	61.42
Wadley, J. W., Texarkana, Ark.	2,892.84	2,834.98
Wadsworth et al, Wichita Falls	2,217.70	1,437.26
Waggoner Refining Co., Inc., Electra	81,233.29	73,739.82
Waggoner, E. P., and C. F. Kolp, Electra	3,190.06	2,946.04
Waghalter, L. E., (receiver for A. & P. Oil Co.), Tyler	4,102.72	3,969.66
Waggoner, W. T., estate, Fort Worth	956.88	892.73
Wahpoo Oil Co., Rockdale	767.51	476.68
Wainwright West Oils, Ltd., Henderson	11,510.00	11,279.80
Wainwright West Oils, Ltd., Henderson	8,269.00	7,126.19
Walker, A. C., Albany	1,425.42	1,313.24
Wallace & Emrick, Minerva	236.65	146.68
Wallace & Davis, Minerva	302.44	178.47
Wallace, R. J., Colorado	1,741.32	1,131.85
Wallace, Dr. Chas. W., Wichita Falls	31,064.49	30,702.97
Wallace, W. W., Cisco	714.30	657.17
Walton, W. D., et al, Henderson	5,211.06	5,106.84
Wentz, L. H., Ponca City, Okla.	11,518.82	11,224.78
Ward Oil Corp., Ardmore, Okla.	199,172.96	162,352.47
Warner Oil Co., Borger	5,431.72	5,348.50
Warner-Quinlan Co. of Texas, Houston	102,173.49	65,137.50
Washington Oil Corp. of Texas, Dallas	5,540.17	5,429.37
Washoma Petroleum Co., Enid, Okla.	7,688.87	6,766.21
Watson, R. J., Newcastle	4,084.07	3,572.00
Watson, Panay F., Electra	768.04	768.04
Weaver-Crim Corp., Eastland	55,882.24	54,245.93
Weaver & Pois, Wichita Falls	1,057.95	1,020.32
Webb, Luther, Vernon	3,902.48	3,588.67
Webb, J. R., Corsicana	164.21	155.14
Webb, J. R., and J. H. Bryant, Corsicana	247.05	175.73
Webb Oil Co., Humble	3,420.59	2,736.39
C. J. Webster, Oil & Gas Co., San Antonio	11,386.49	11,158.72
Weekley Oil Corp., Fort Worth	47,206.37	30,182.22
Wilder, J. W., et al, Cross Plains	1,341.85	1,337.45
Weinert, H. H., Sequin	28,659.63	21,495.61
Weldon Oil Co., Saratoga	8,033.89	6,103.82
Wellington Oil Co., Ltd., Los Angeles, Calif.	15,700.32	15,386.30
Wells & Gann Drilling Co., Tyler	30,636.20	30,013.50
Werby, J. Z., Longview	12,588.84	11,317.71
West, O. H., (receiver for Atlantic & Pacific), Longview	5,583.86	4,831.04
West, C. K., Arp	5,836.00	5,719.28
West, C. K., Breckenridge	3,325.53	2,530.50
West Florida Co., Bagdag, Fla.	5,255.53	5,085.35
West Production Co., Houston	10,144.02	8,772.82
West Texas Petroleum Corp., San Angelo	20,265.97	12,788.42
West Brook Oil Corp., Oper. Acct., Fort Worth	33,881.50	21,398.94
Westbrook, R. A., Prod., Acct., Fort Worth	3,894.96	2,469.32
Western States Royalties Co., Chicago	15,614.56	15,171.25
West Texas Oil & Royalty Corp., Fort Worth	12,669.01	12,415.63
Westheimer & Daube, Ardmore, Okla.	36,523.97	35,428.29
Whale Oil Corp., Corsicana	12,058.47	11,657.96
Wheelock & Collins, Corsicana	50,187.39	48,886.09
White, James H., Wichita Falls	2,826.33	2,713.28
White & Duncan, Wichita Falls	10,732.69	9,645.48
Whitehill Oil Corp., The Tulsa	3,815.12	3,743.58
Whittington, J. O., Longview	40,325.03	39,518.51
Wichita Production Co., Wichita Falls	6,862.23	6,479.20
Wilbarger Oil Co., Wichita Falls	908.96	803.16
Wilcox, H. F., Oil & Gas Co. of Texas, Tulsa	124,618.44	108,149.54
Wilder, Jack, Rice	292.70	289.99
Williford Co., Inc.	6,491.53	6,229.23
Williams, Clayton W., trustee, Fort Stockton	47,740.17	28,371.80
Williams, J. H., Somerset	251.08	180.76
Williams, Mrs. Cora B., Dallas	2,522.29	2,397.17
Wills Oil Co., Rockdale	619.57	390.26
Wilson, W. I., Electra	863.58	863.58
Wilson, Lee, estate, Wichita Falls	2,684.09	2,484.84
Wilson-Broack Co., Beaumont	10,511.52	8,335.96
Wilson & Brown, Kilgore	7,241.88	7,097.04
Wilson Drilling Co., Wichita Falls	5,633.55	5,565.32
Wilson Oil Co., Houston	14,175.10	11,348.07
Winch & Billings, Laredo	34,873.13	28,597.40
Winston Oil Co., McAlester, Okla.	21,492.13	20,923.03
Wise & Jackson, Sapulpa, Okla.	6,038.48	5,596.72
Wise & Porterfield, Tyler	3,248.39	3,118.44
Witcher, W. C., et al, Wichita Falls	283.37	279.85
Witcher, Annie L., guardian, Wichita Falls	2,735.87	2,712.80
Witherspoon Oil Co., San Antonio	6,656.82	6,397.32
Witherspoon, C. L., and Chiquita Oil Co., San Antonio	26,983.25	21,232.31
Wittmer Oil & Gas Properties, Pittsburgh	737.00	597.87
Wolf, D. L., Olney	6,366.92	5,937.61
Wolf, A. T., Wichita Falls	4,001.09	3,936.03
Wolfe, R. A., Houston	5,959.13	5,844.80
Wo-Mac Oil Co., Wichita Falls	3,605.42	3,605.42
Wood, Benton, Lesh & McCal, Nacona	2,541.36	1,931.43
Wood, Clint, Drilling Co., Inc., Breckenridge	5,574.08	5,462.59
Woodburn Oil Corp., Dallas	742.50	732.09
Woodley Petroleum Co., Shreveport, La.	108,711.88	102,004.24
Woodruff Development Co., Inc., Cleveland, Ohio	659.00	514.68
Woods & Bennett, Humble	5,251.04	4,148.03
Woods, J. A., and Salome & Cooper Drlg. Co., Wichita, Kans.	20,312.01	19,905.75
Woods, J. A., and Salome & Cooper Drlg. Co., Wichita, Kans.	5,867.44	5,750.09
Woody, W. C., Wichita Falls	11,633.05	11,444.13
World Oil Co., Inc., Fort Worth	4,255.76	2,787.54
Worth Oil Co., Wichita Falls	4,901.01	4,331.46
Worth Petroleum Co., Fort Worth	4,893.99	4,500.69
Wright, Elsie E., Wichita Falls	335.40	313.54
Wright-Smith Oil Co., Ardmore, Okla.	12,087.46	11,845.72
Wright, H. L., receiver for Alamo Drilling & Leasing Co., Mirando City	6,795.13	5,434.10
Y		
Yeager, Henry, Dallas	5,585.61	5,699.60
York Petroleum Co., Stamford	50.00	42.50
Yount Lee Oil Co., Beaumont	1,398,129.34	1,250,587.42
Yuba Oil Co., Nacogdoches	1,249.00	936.75
Z		
Zadie Belle Oil Co., Mineral Wells	652.00	398.04

SUMMARY OF STATEMENTS RELATING TO BUSINESS OF VARIOUS EASTERN PIPE LINES FOR MONTH ENDING AUGUST 31, 1932

	Gross stocks	Runs from wells	Other receipts	Regular deliveries	Other deliveries
Nat. Transit	685,167.99	275,750.53	659,524.50	534,240.67	271,560.12
S. W. Pa. P. L.	549,692.76	62,129.52	675,332.31	426,871.06	300,618.47
Eureke P. L.	1,004,657.06	266,577.80	201,917.88	252,456.47	326,852.96
Buckeye P. L. (Mackusurg)	289,650.01	237,716.09	136,661.23	249,820.07	118,452.17
Buckeye P. L. (Lima, etc)	2,989,681.41	81,587.39	2,111,429.60	1,472,333.62	682,190.45
Buckeye P. L. (Cleveland)	52,664.82	11,208.49	225,373.34	1,953.72	213,541.99
Indiana P. L.	490,709.25	2,458.46	1,235,211.21	886,983.80	321,159.26
Southern P. L.	226,712.22	.....	166,785.78	69,501.52	24,742.69
Bradford Trans.	204,681.76	381,997.45	.....	441,852.71	.....
N. Y. Transit	92,271.56	39,020.34	135,077.19	179,437.69	331,582.87
Northern P. L.	235,956.96	.....	321,981.90	24,426.40	.....
Tide Water P. L.	728,922.28	25,557.98	.....	391,155.65	.....
Tuscarora Dev.	2,723.09	.....	.....	203,088.81	.....
Total August 31	7,553,491.17	1,384,004.05	5,869,295.03	5,134,122.19	2,690,700.69
Total July 31	7,500,193.52	1,351,504.86	6,275,012.65	5,733,360.45	3,040,417.50
Difference	53,297.85	32,499.19	405,717.62	599,238.26	349,717.67